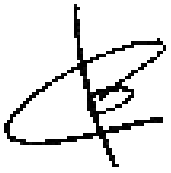
All.3 Dati tecnici componenti principali-certificazioni-collaudi.



All.3.1 Gruppi elettrogeni.

PARTE 1

Proprietà

DATA 4 ITALY

Progetto

DC 07
MILAN

Supervisore delegato del committente	**GIS.IMO S.r.l.** centro direzionale quattrotorri 06132 PERUGIA	Tél. : +39 075 517 29 83 Fax : +39 075 518 12 88
Assistente del committente	**GARRETTI ASSOCIATI S.r.l.** via Trieste, 9 - 20146 MILANO www.garrettiassociati.it	Tél. : +39 02 430 6931 Fax : +39 02 480 170 51
Progetto architettonico	**GARRETTI ASSOCIATI S.r.l.** via Trieste, 9 - 20146 MILANO www.garrettiassociati.it	Tél. : +39 02 430 6931 Fax : +39 02 480 170 51
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impianti elettrici/dati	**ENGIE CONTRACTING ITALIA S.r.l.** Via Chiese, 72 - 20126 - MILANO www.engie.com	Tél. : +39 02 94399262 Fax : +39 02 94399655
	SCHNEIDER ELECTRIC S.p.A. Via Circonvallazione Est, 1 - 24040 STEZZANO (BG) www.schneider-electric.com	Tél. : +39 0354151111 Fax : +39 0354153200
	ENERIA Rue de Longpont - BP 10202 - 91311 MONTLHERY Cedex - FRANCE www.eneria.fr	Tél. : +33 (0) 169802100 Fax : +33 (0) 169802150
Progettazione antincendio	**STUDIO TECNICO ZACCARELLI S.r.l.** via Ludovico il Moro, 17 - 20143 MILANO www.studiozaccarelli.it	Tél. : +39 02 891 200 81 Fax : +39 02 813 962 8
Supervisione	**ITALSOCOTEC S.p.a.** Via Pontaccio,12/A- 20121 Milano italsocotec@italsocotec.it	Tél. : +39 02 89051500 Fax : +39 02 89051501

Cod	Data	Descrizione
	25/01/2023	DOE

DATA 4 ITALY - DC07 Milan

Fiche technique groupe électrogène / Genset datasheet

Scheda gruppo elettrogeno

Cat® 3516E

Diesel Generator Sets

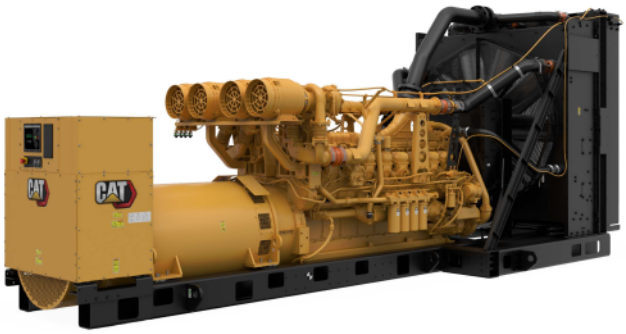


Image shown may not reflect actual configuration

Bore – mm (in)	170 (6.69)
Stroke – mm (in)	215 (8.46)
Displacement – L (in^3)	78.1 (4766)
Compression Ratio	14.0:1
Aspiration	TA
Fuel System	EUI
Governor Type	ADEM™ A5

Standby 50 Hz kVA (ekW)	Mission Critical 50 Hz kVA (ekW)	Prime 50 Hz kVA (ekW)	Emissions Performance
3500 (2800)	3500 (2800)	3175 (2540)	Tier 2 Equivalent US. EPA Stationary Emergency
3250 (2600)	3250 (2600)	2950 (2360)	
3000 (2400)	3000 (2400)	2725 (2180)	

Features

Cat® Diesel Engine

- Tier 2 Equivalent (U.S. EPA Stationary Emergency) emissions standards
- Reliable performance proven in thousands of applications worldwide

Generator Set Package

- Accepts 100% block load in one step and meets NFPA 110 loading requirements
- Conforms to ISO 8528-5 G3 load acceptance requirements
- Reliability verified through torsional vibration, fuel consumption, oil consumption, transient performance, and endurance testing

Alternators

- Superior motor starting capability minimizes need for oversizing generator
- Designed to match performance and output characteristics of Cat diesel engines

Cooling System

- Cooling systems available to operate in ambient temperatures up to 50°C (122°F)
- Tested to ensure proper generator set cooling

EMCP 4 Control Panels

- User-friendly interface and navigation
- Scalable system to meet a wide range of installation requirements
- Expansion modules and site specific programming for specific customer requirements

Warranty

- 24 months/1000-hour warranty for standby ratings
- Extended service protection is available to provide extended coverage options

Worldwide Product Support

- Cat dealers have over 1,800 dealer branch stores operating in 200 countries
- Your local Cat dealer provides extensive post-sale support, including maintenance and repair agreements

Financing

- Caterpillar offers an array of financial products to help you succeed through financial service excellence
- Options include loans, finance lease, operating lease, working capital, and revolving line of credit
- Contact your local Cat dealer for availability in your region

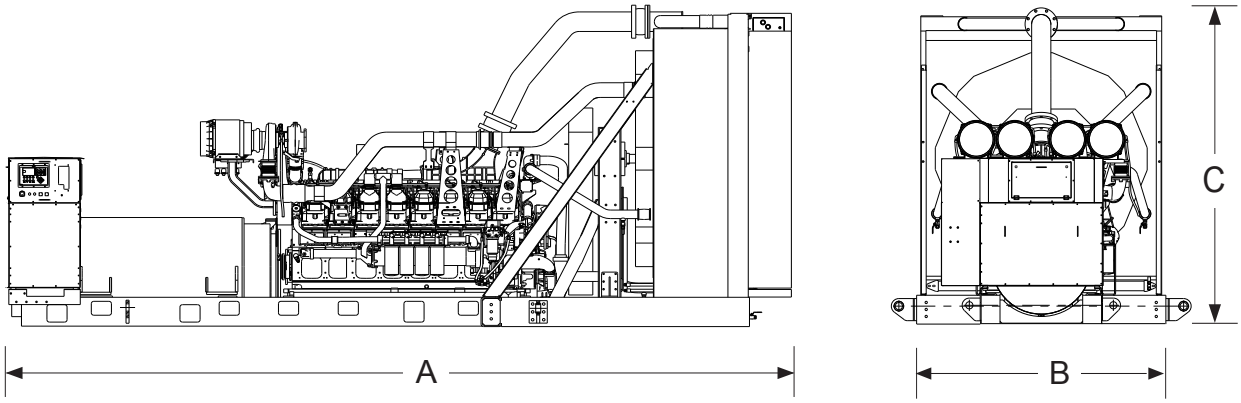
Package Performance

Performance	Standby		Mission Critical		Prime	
Engine Speed	1500 rpm		1500 rpm		1500 rpm	
Frequency	50 Hz		50 Hz		50 Hz	
Gen set power rating with fan	2600 ekW		2600 ekW		2360 ekW	
Gen set power rating with fan @ 0.8 power factor	3250 kVA		3250 kVA		2950 kVA	
Emissions	Tier 2 (EPA ESE)		Tier 2 (EPA ESE)		Tier 2 (EPA ESE)	
Performance number	EM4773-04		EM4779-01		EM4785-01	
Fuel Consumption						
100% load with fan – L/hr (gal/hr)	706.2	(186.6)	706.2	(186.6)	656.8	(173.5)
75% load with fan – L/hr (gal/hr)	562.6	(148.6)	562.6	(148.6)	519.8	(137.5)
50% load with fan – L/hr (gal/hr)	381.1	(100.7)	381.1	(100.7)	351.3	(92.8)
25% load with fan – L/hr (gal/hr)	215.9	(57.0)	215.9	(57.0)	201.1	(53.1)
Cooling System						
Radiator air flow restriction (system) – kPa (in. water)	0.12	(0.48)	0.12	(0.48)	0.12	(0.48)
Radiator air flow – m^3/min (cfm)	2878	(101635)	2878	(101635)	2878	(101635)
Engine coolant capacity – L (gal)	179.0	(47.3)	179.0	(47.3)	179.0	(47.3)
Radiator coolant capacity – L (gal)	202.0	(53.4)	202.0	(53.4)	202.0	(53.4)
Total coolant capacity – L (gal)	381.0	(100.7)	381.0	(100.7)	381.0	(100.7)
Inlet Air						
Combustion air inlet flow rate – m^3/min (cfm)	212.5	(7502.5)	212.5	(7502.5)	202.6	(7155.0)
Exhaust System						
Exhaust stack gas temperature – °C (°F)	495.0	(922.9)	495.0	(922.9)	495.2	(923.4)
Exhaust gas flow rate – m^3/min (cfm)	578.0	(20408.1)	578.0	(20408.1)	549.3	(19395.4)
Exhaust system backpressure (maximum allowable) – kPa (in. water)	7.0	(28.1)	7.0	(28.1)	7.0	(28.1)
Heat Rejection						
Heat rejection to jacket water – kW (Btu/min)	880	(50024)	880	(50024)	822	(46767)
Heat rejection to exhaust (total) – kW (Btu/min)	2766	(157294)	2766	(157294)	2635	(149839)
Heat rejection to aftercooler – kW (Btu/min)	817	(46478)	817	(46478)	741	(42144)
Heat rejection to atmosphere from engine – kW (Btu/min)	168	(9556)	168	(9556)	165	(9395)
Heat rejection from alternator – kW (Btu/min)	113	(6426)	113	(6426)	88	(5010)
Emissions* (Nominal) - Full Load						
NOx mg/Nm^3 (g/hp-h)	2176.4	(4.68)	2176.4	(4.68)	1839.1	(4.03)
CO mg/Nm^3 (g/hp-h)	265.8	(0.57)	265.8	(0.57)	319.3	(0.70)
HC mg/Nm^3 (g/hp-h)	12.4	(0.03)	12.4	(0.03)	12.9	(0.03)
PM mg/Nm^3 (g/hp-h)	11.5	(0.03)	11.5	(0.03)	15.7	(0.04)
Emissions* (Potential Site Variation) - Full Load						
NOx mg/Nm^3 (g/hp-h)	2611.7	(5.62)	2611.7	(5.62)	2207.0	(4.83)
CO mg/Nm^3 (g/hp-h)	478.4	(1.03)	478.4	(1.03)	574.8	(1.27)
HC mg/Nm^3 (g/hp-h)	16.5	(0.04)	16.5	(0.04)	17.1	(0.04)
PM mg/Nm^3 (g/hp-h)	16.1	(0.04)	16.1	(0.04)	22.0	(0.06)

**mg/Nm³ levels are corrected to 5% O_2. Contact your local Cat dealer for further information*

3516E Diesel Generator Sets
Electric Power

Weights and Dimensions



Standby Rating kVA	Dim "A" mm (in)	Dim "B" mm (in)	Dim "C" mm (in)	Dry Weight kg (lb)
3500	7785 (306.5)	2612 (102.8)	3342 (131.6)	20 707 (45,651)
3250 / 3000	7685 (302.6)	2612 (102.8)	3342 (131.6)	20 380 (44,930)

Note: *For reference only. Do not use for installation design.*
Contact your local Cat dealer for precise weights and dimensions.

Standby
Output available with varying load for the duration of the interruption of the normal source power. Average power output is 70% of the standby power rating. Typical operation is 200 hours per year, with maximum expected usage of 500 hours per year.

Mission Critical
Output available with varying load for the duration of the interruption of the normal source power. Average power output is 85% of the mission critical power rating. Typical peak demand up to 100% of rated power for up to 5% of the operating time. Typical operation is 200 hours per year, with maximum expected usage of 500 hours per year.

Prime
Output available with varying load for an unlimited time. Average power output is 70% of the prime power rating. Typical peak demand is 100% of prime rated ekW with 10% overload capability for emergency use for a maximum of 1 hour in 12. Overload operation cannot exceed 25 hours per year.

Applicable Codes and Standards
AS 1359, IBC, IEC 60034-1, ISO 3046, ISO 8528, NEMA MG1-22, NEMA MG1-33, 2014/35/EU, 2006/42/EC, 2014/30/EU and facilitates compliance to NFPA 37, NFPA 70, NFPA 99, NFPA 110.

Note: Codes may not be available in all model configurations. Please consult your local Cat dealer for availability.

Data Center Applications
- ISO 8528-1 Data Center Power (DCP) compliant per DCP application of Cat diesel generator set prime power rating.
- All ratings Tier III/Tier IV compliant per Uptime Institute requirements.
- All ratings ANSI/TIA-942 compliant for Rated-1 through Rated-4 data centers.

Fuel Rates
Fuel rates are based on fuel oil of 35º API [16°C (60ºF)] gravity having an LHV of 42,780 kJ/kg (18,390 Btu/lb) when used at 29ºC (85ºF) and weighing 838.9 g/liter (7.001 lbs/U.S. gal.)

www.cat.com/electricpower

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Materials and specifications are subject to change without notice.
The International System of Units (SI) is used in this publication.

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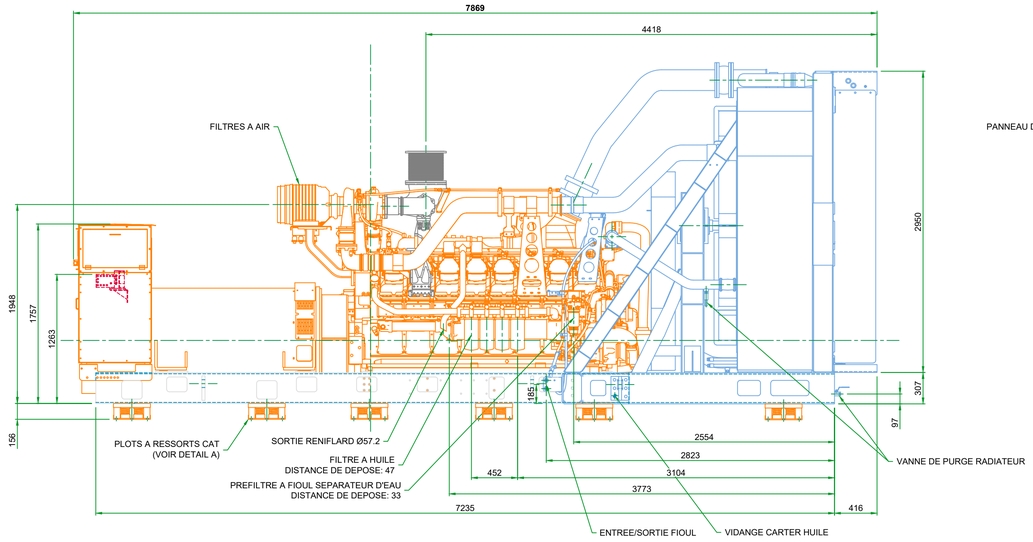
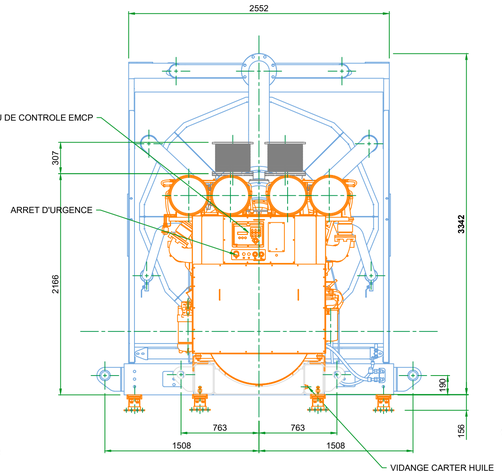
3516 PGFL 3516PGC8
LEHE1993-03 (10/20)

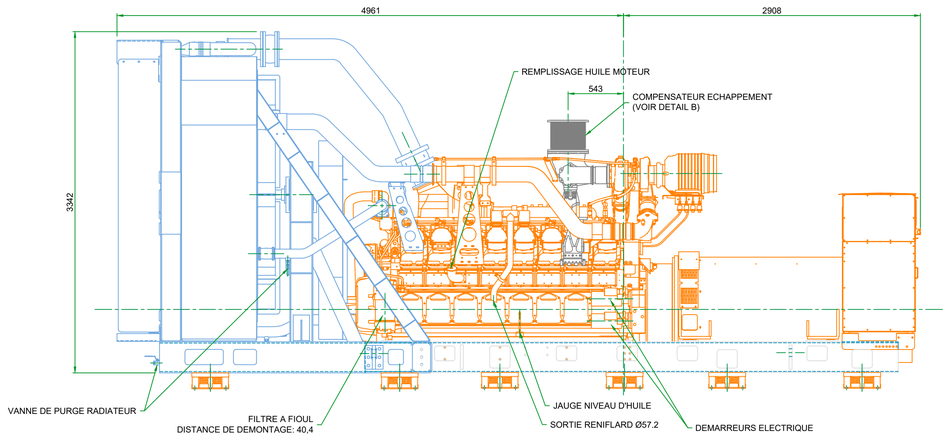
VUE DE DROITE



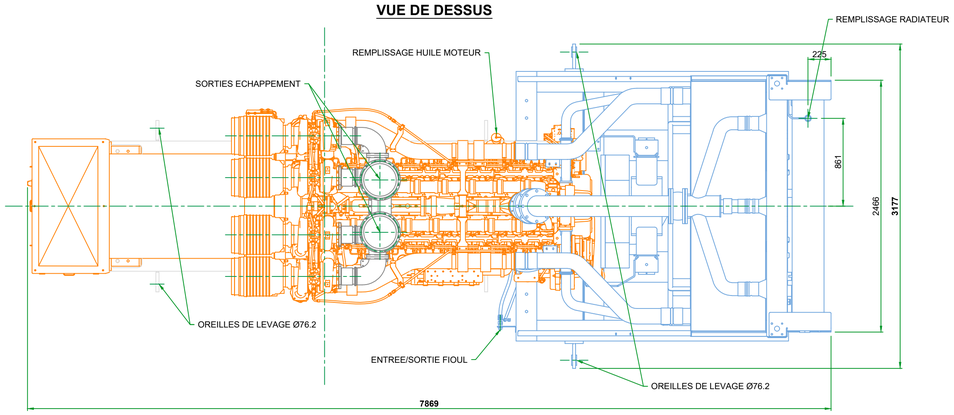
VUE ARRIERE



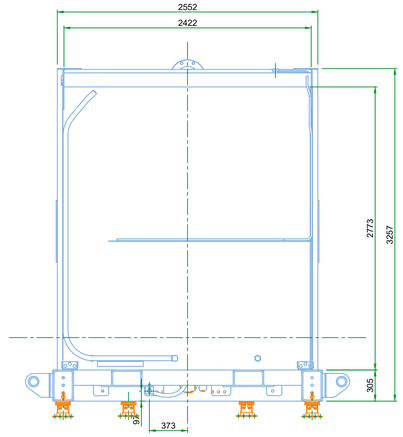
VUE DE GAUCHE



VUE DE DESSUS



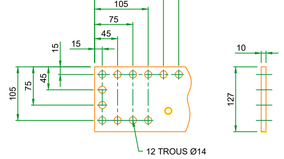
VUE DE FACE



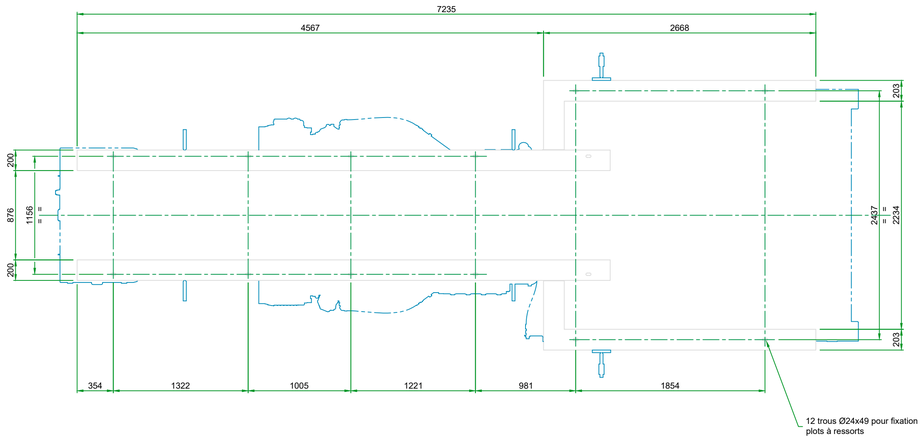
FEATURE CODE	PUISSANCE	DONNEES TECHNIQUES				
		Poids à vide	Capacité eau	Capacité huile	Poids total en ordre de marche	Débit radiateur
516DRT4	3250kVA	20 380kg	381L	481L	21 270kg	172 680m³/h
516DRT6	3500kVA	20 710kg			21 600kg	

DETAIL JEU DE BARRES

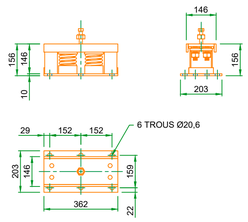
(T0, T1, T2, T3)



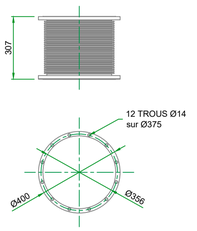
PLAN DE POSE-VUE DE DESSUS



DETAIL A
PLOTS A RESSORTS CAT



DETAIL B
COMPENSATEUR ECHAPPEMENT



Révision	Date	Auteur	Vérification	Observation	Validation
02	13/06/22	RIGAUD L.	DECHERAT G.	MAJ 12 TROUS COMPENSATEUR ECHAPPEMENT	DECHERAT G.
01	20/01/22	BEZIER D.	DECHERAT G.	MISE A JOUR PLOTS CAT	DECHERAT G.
00	29/06/21	BEZIER D.	DECHERAT G.	POUR DIFFUSION	DECHERAT G.

Eneria - Siège social
rue de Longpont - B.P. 10202
91311 MONTLHERY CEDEX

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Site internet : www.eneria.com

Groupe Electrogène Standard
INVESTOR

PLAN D'ENSEMBLE
3516E - 3250kVA / 3500kVA

FORMAT	ECHELLE	FOLIO	N° AFFAIRE	N° DE PLAN ENERIA	REVISION
A1	1/30	1/1	STD	GDEN 210278	02

CE DOCUMENT EST LA PROPRIÉTÉ D'ENERIA ET NE PEUT ÊTRE REPRODUIT OU COMMUNIQUÉ SANS SON AUTORISATION.

Proprietà

DATA 4 ITALY

Progetto

DC 07
MILAN

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Impianti meccanici	**OMEGA CONCEPT IMPIANTI E SISTEMI S.p.a.** Via Chiese, 72 - 20126 - MILANO www.engie-axima.fr	Tél. : +39 02 8180951 Fax : +39 02 8135163
impianti elettrici/dati	**ENGIE CONTRACTING ITALIA S.r.l.** Via Chiese, 72 - 20126 - MILANO www.engie.com	Tél. : +39 02 94399262 Fax : +39 02 94399655
	SCHNEIDER ELECTRIC S.p.A. Via Circonvallazione Est, 1 - 24040 STEZZANO (BG) www.schneider-electric.com	Tél. : +39 0354151111 Fax : +39 0354153200
	ENERIA Rue de Longpont - BP 10202 - 91311 MONTLHERY Cedex - FRANCE www.eneria.fr	Tél. : +33 (0) 169802100 Fax : +33 (0) 169802150
Progettazione antincendio	**STUDIO TECNICO ZACCARELLI S.r.l.** via Ludovico il Moro, 17 - 20143 MILANO www.studiozaccarelli.it	Tél. : +39 02 891 200 81 Fax : +39 02 813 962 8
Supervisione	**ITALSOCOTEC S.p.a.** Via Pontaccio,12/A- 20121 Milano italsocotec@italsocotec.it	Tél. : +39 02 89051500 Fax : +39 02 89051501

Cod	Data	Descrizione
	25/01/2023	DOE

DATA 4 ITALY - DC07 Milan

Fiche technique alternateur / Generator Datasheet

Scheda Generatore

GENERATOR DATA

(AT400240)-ENGINE (BAA126422A)-CEM

AUGUST 30, 2021

For Help Desk Phone Numbers Click here

Selected Model

Engine: 3516	**Generator Frame:** 1868E	**Genset Rating (kW):** 2600.0	**Line Voltage:** 400
Fuel: Diesel	**Generator Arrangement:** 5851976	**Genset Rating (kVA):** 3250.0	**Phase Voltage:** 230
Frequency: 50	**Excitation Type:** Permanent Magnet	**Pwr. Factor:** 0.8	**Rated Current:** 4691.0
Duty: STANDBY	**Connection:** SERIES STAR	**Application:** EPG	**Status:** Current

Version: 20206 /20206 /20206 /675482

Spec Information

Generator Specification

Frame: 1868E	**Type:** SR5	**No. of Bearings:** 2
Winding Type: FORM WOUND		**Flywheel:** 21.0
Connection: SERIES STAR		**Housing:** 00
Phases: 3		**No. of Leads:** 6
Poles: 4		**Wires per Lead:** 8
Sync Speed: 1500		**Generator Pitch:** 0.6667

Generator Efficiency

Per Unit Load	kW	Efficiency %
0.25	650.0	94.2
0.5	1300.0	96.1
0.75	1950.0	96.3
1.0	2600.0	96.1

Reactances	Per Unit	Ohms
SUBTRANSIENT - DIRECT AXIS X''_d	0.1178	0.0058
SUBTRANSIENT - QUADRATURE AXIS X''_q	0.1280	0.0063
TRANSIENT - SATURATED X'_d	0.1523	0.0075
SYNCHRONOUS - DIRECT AXIS X_d	3.1159	0.1534
SYNCHRONOUS - QUADRATURE AXIS X_q	1.3244	0.0652
NEGATIVE SEQUENCE X_2	0.1706	0.0084
ZERO SEQUENCE X_0	0.0467	0.0023

Time Constants	Seconds
OPEN CIRCUIT TRANSIENT - DIRECT AXIS T'_{d0}	5.5950
SHORT CIRCUIT TRANSIENT - DIRECT AXIS T'_d	0.3618
OPEN CIRCUIT SUBSTRANSIENT - DIRECT AXIS T''_{d0}	0.0087
SHORT CIRCUIT SUBSTRANSIENT - DIRECT AXIS T''_d	0.0073
OPEN CIRCUIT SUBSTRANSIENT - QUADRATURE AXIS T''_{q0}	0.0080
SHORT CIRCUIT SUBSTRANSIENT - QUADRATURE AXIS T''_q	0.0068
EXCITER TIME CONSTANT T_e	0.2200
ARMATURE SHORT CIRCUIT T_a	0.0463

Short Circuit Ratio: 0.45	Stator Resistance = 8.0E-4 Ohms	Field Resistance = 1.106 Ohms

Voltage Regulation

Voltage level adjustment: +/-	5.0%
Voltage regulation, steady state: +/-	0.5%
Voltage regulation with 3% speed change: +/-	0.5%
Waveform deviation line - line, no load: less than	3.0%
Telephone influence factor: less than	100

Generator Excitation

	No Load	Full Load, (rated) pf	
		Series	Parallel
Excitation voltage:	13.4 Volts	64.54 Volts	Volts
Excitation current	1.23 Amps	4.88 Amps	Amps

Selected Model

Engine: 3516	**Generator Frame:** 1868E	**Genset Rating (kW):** 2600.0	**Line Voltage:** 400
Fuel: Diesel	**Generator Arrangement:** 5851976	**Genset Rating (kVA):** 3250.0	**Phase Voltage:** 230
Frequency: 50	**Excitation Type:** Permanent Magnet	**Pwr. Factor:** 0.8	**Rated Current:** 4691.0
Duty: STANDBY	**Connection:** SERIES STAR	**Application:** EPG	**Status:** Current

Version: 20206 /20206 /20206 /675482

Generator Mechanical Information

Center of Gravity

Dimension X	-1182.3 mm	-46.5 IN.
Dimension Y	0.0 mm	0.0 IN.
Dimension Z	0.0 mm	0.0 IN.

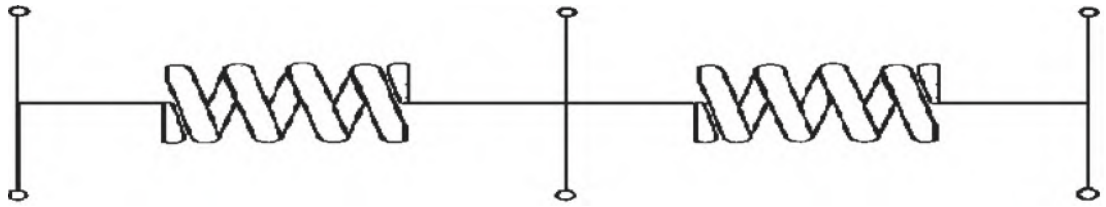
- "X" is measured from driven end of generator and parallel to rotor. Towards engine fan is positive. See General Information for details
- "Y" is measured vertically from rotor center line. Up is positive.
- "Z" is measured to left and right of rotor center line. To the right is positive.

Generator WT = 5820 kg * Rotor WT = 2065 kg * Stator WT = 3225 kg
12,831 LB 4,553 LB 7,110 LB

Rotor Balance = 0.0508 mm deflection PTP

Overspeed Capacity = 150% of synchronous speed

Generator Torsional Data



J1 = Coupling and Fan | **J2 = Rotor** | **J3 = Exciter End**

TOTAL J = J1 + J2 + J3

K1 = Shaft Stiffness between J1 + J2 (Diameter 1)

K2 = Shaft Stiffness between J2 + J3 (Diameter 2)

J1	K1	Min Shaft Dia 1	J2	K2	Min Shaft Dia 2	J3
46.9 LB IN. s^2	58.6 MLB IN./rad	5.0 IN.	632.8 LB IN. s^2	44.3 MLB IN./rad	3.7 IN.	6.2 LB IN. s^2
5.3 N m s^2	6.62 MN m/rad	127.0 mm	71.5 N m s^2	5.01 MN m/rad	95.2 mm	0.7 N m s^2

Total J

685.9 LB IN. s^2

77.5 N m s^2

Selected Model

Engine: 3516 **Generator Frame:** 1868E **Genset Rating (kW):** 2600.0 **Line Voltage:** 400

Fuel: Diesel **Generator Arrangement:** 5851976 **Genset Rating (kVA):** 3250.0 **Phase Voltage:** 230

Frequency: 50 **Excitation Type:** Permanent Magnet **Pwr. Factor:** 0.8 **Rated Current:** 4691.0

Duty: STANDBY **Connection:** SERIES STAR **Application:** EPG **Status:** Current

Version: 20206 /20206 /20206 /675482

Generator Cooling Requirements - Temperature - Insulation Data

Cooling Requirements:		**Temperature Data: (Ambient 40 ^{0}C)**	
Heat Dissipated:	106.0 kW	**Stator Rise:**	150.0 ^{0}C
Air Flow:	227.0 m^3/min	**Rotor Rise:**	150.0 ^{0}C

Insulation Class: H

Insulation Reg. as shipped: 100.0 MΩ minimum at 40 ^{0}C

Thermal Limits of Generator

Frequency:	50 Hz
Line to Line Voltage:	400 Volts
B BR 80/40	2400.0 kVA
F BR -105/40	2780.0 kVA
H BR - 125/40	3000.0 kVA
F PR - 130/40	3000.0 kVA
H PR - 150/40	3250.0 kVA

Selected Model

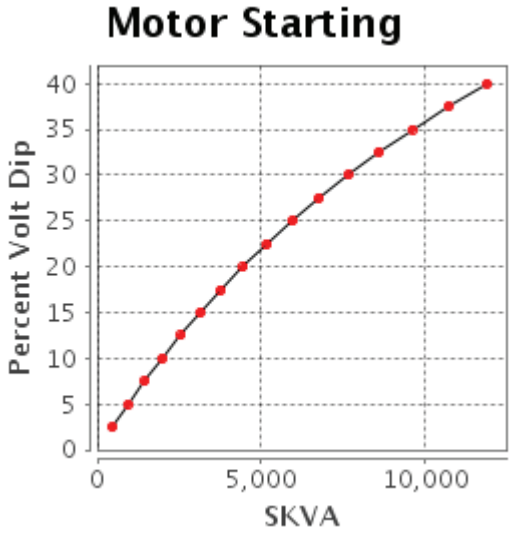
Engine: 3516	**Generator Frame:** 1868E	**Genset Rating (kW):** 2600.0	**Line Voltage:** 400
Fuel: Diesel	**Generator Arrangement:** 5851976	**Genset Rating (kVA):** 3250.0	**Phase Voltage:** 230
Frequency: 50	**Excitation Type:** Permanent Magnet	**Pwr. Factor:** 0.8	**Rated Current:** 4691.0
Duty: STANDBY	**Connection:** SERIES STAR	**Application:** EPG	**Status:** Current

Version: 20206 /20206 /20206 /675482

Starting Capability & Current Decrement

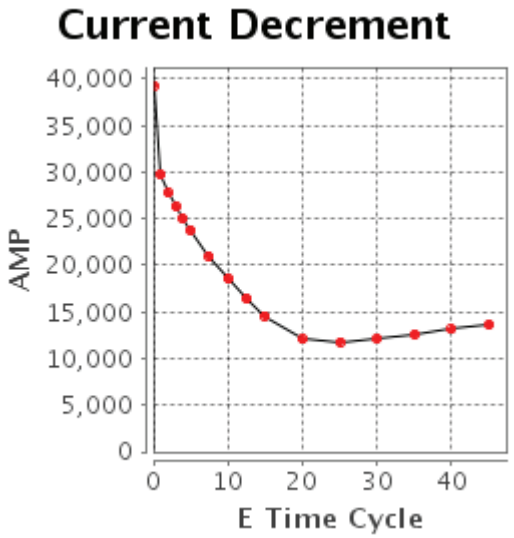
Motor Starting Capability (0.4 pf)

SKVA	Percent Volt Dip
457	2.5
939	5.0
1,446	7.5
1,982	10.0
2,548	12.5
3,148	15.0
3,784	17.5
4,459	20.0
5,179	22.5
5,946	25.0
6,766	27.5
7,645	30.0
8,588	32.5
9,605	35.0
10,702	37.5
11,892	40.0



Current Decrement Data

E Time Cycle	AMP
0.0	39,307
1.0	29,725
2.0	27,736
3.0	26,326
4.0	25,022
5.0	23,790
7.5	20,994
10.0	18,558
12.5	16,437
15.0	14,589
20.0	12,041
25.0	11,804
30.0	12,146
35.0	12,624
40.0	13,126
45.0	13,645



Instantaneous 3 Phase Fault Current: 39307 Amps **Instantaneous Line - Line Fault Current:** 27898 Amps

Instantaneous Line - Neutral Fault Current: 41550 Amps

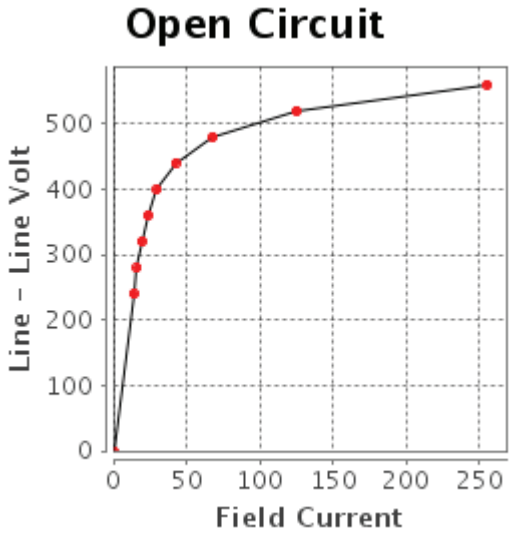
Selected Model

Engine: 3516	**Generator Frame:** 1868E	**Genset Rating (kW):** 2600.0	**Line Voltage:** 400
Fuel: Diesel	**Generator Arrangement:** 5851976	**Genset Rating (kVA):** 3250.0	**Phase Voltage:** 230
Frequency: 50	**Excitation Type:** Permanent Magnet	**Pwr. Factor:** 0.8	**Rated Current:** 4691.0
Duty: STANDBY	**Connection:** SERIES STAR	**Application:** EPG	**Status:** Current

Version: 20206 /20206 /20206 /675482

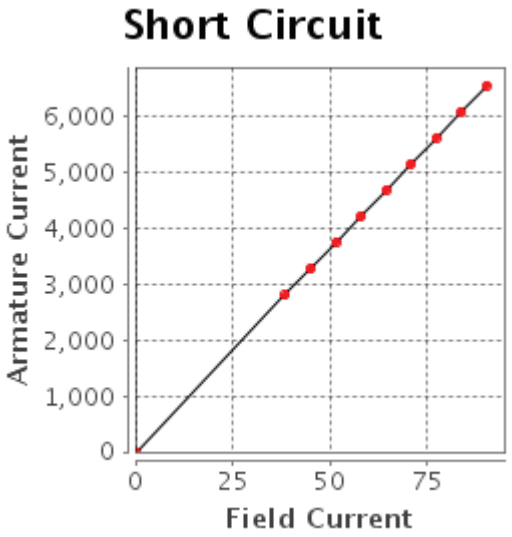
Generator Output Characteristic Curves
Open Circuit Curve

Field Current	Line - Line Volt
0.0	0
13.8	240
16.4	280
19.4	320
23.5	360
30.1	400
42.5	440
68.3	480
125.4	520
255.7	560



Short Circuit Curve

Field Current	Armature Current
0.0	0
38.6	2,815
45.1	3,284
51.5	3,753
58.0	4,222
64.4	4,691
70.8	5,160
77.3	5,629
83.7	6,098
90.2	6,567



Selected Model

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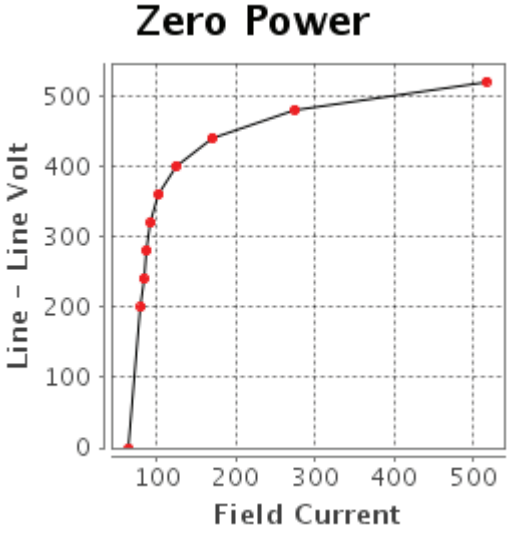
Fuel: Diesel	**Generator Arrangement:** 5851976	**Genset Rating (kVA):** 3250.0	**Phase Voltage:** 230
Frequency: 50	**Excitation Type:** Permanent Magnet	**Pwr. Factor:** 0.8	**Rated Current:** 4691.0
Duty: STANDBY	**Connection:** SERIES STAR	**Application:** EPG	**Status:** Current

Version: 20206 /20206 /20206 /675482

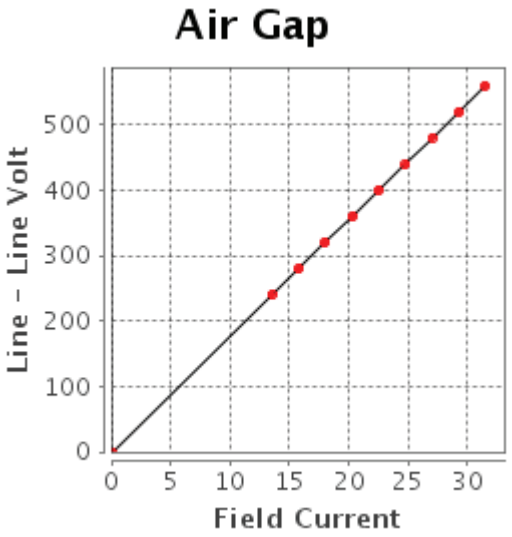
Generator Output Characteristic Curves
Zero Power Factor Curve

Field Current	Line - Line Volt
64.4	0
79.7	200
82.6	240
86.4	280
92.1	320
102.4	360
123.5	400
169.7	440
274.4	480
515.7	520



Air Gap Curve

Field Current	Line - Line Volt
0.0	0
13.5	240
15.8	280
18.0	320
20.3	360
22.5	400
24.8	440
27.0	480
29.3	520
31.5	560



Selected Model

Engine: 3516	**Generator Frame:** 1868E	**Genset Rating (kW):** 2600.0	**Line Voltage:** 400
Fuel: Diesel	**Generator Arrangement:** 5851976	**Genset Rating (kVA):** 3250.0	**Phase Voltage:** 230
Frequency: 50	**Excitation Type:** Permanent Magnet	**Pwr. Factor:** 0.8	**Rated Current:** 4691.0
Duty: STANDBY	**Connection:** SERIES STAR	**Application:** EPG	**Status:** Current

Version: 20206 /20206 /20206 /675482

Selected Model

Engine: 3516	**Generator Frame:** 1868E	**Genset Rating (kW):** 2600.0	**Line Voltage:** 400
Fuel: Diesel	**Generator Arrangement:** 5851976	**Genset Rating (kVA):** 3250.0	**Phase Voltage:** 230
Frequency: 50	**Excitation Type:** Permanent Magnet	**Pwr. Factor:** 0.8	**Rated Current:** 4691.0
Duty: STANDBY	**Connection:** SERIES STAR	**Application:** EPG	**Status:** Current

Version: 20206 /20206 /20206 /675482

General Information

DM7825 Caterpillar SR5 Generators (50 Hz, 60 Hz)
Data for 1400, 1600, 1700, 1800 and 1900 frames Caterpillar SR5 generators built by Leroy Somer - USA and Leroy Somer □ France.

Refer to DM7821 for explanation of all generator data in Technical Marketing Information (TMI) except generator efficiency for which the explanation is given below.

GENERATOR EFFICIENCY
Generator efficiency is the percentage of engine flywheel (or other prime mover) power that is converted into electrical output. The generator efficiency shown is calculated by the summation of all losses method, and is determined in accordance with the IEC Standard 60034. The efficiency considers only the generator. There is no consideration of engine or parasitic losses here.

Refer to DM7829 for low and medium voltage protective setting values a nd limits.

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Proprietà

DATA 4 ITALY

Progetto

DC 07
MILAN

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Fax : +39 02 89051501

Cod	Data	Descrizione
	25/01/2023	DOE

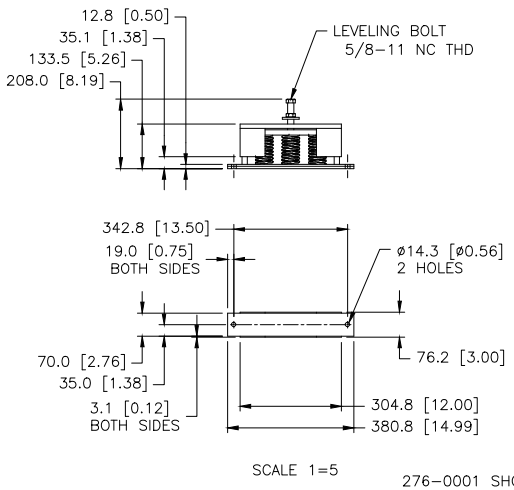
DATA 4 ITALY - DC07 Milan

Fiche technique Plot / Antivibration mount datasheet

Scheda supporti antivibrazione

METRIC 424-2207

MODEL	TYPE	PRICING AR
C27	6	GP-1545 CHG 00
C32		LS-0395 CHG 00
	–	509-9436 CHG 01
3512	1	303-8308 CHG 00
	KB	276-0001 CHG 00
		GZ-0283 CHG 01
		LF-1346 CHG 00
		GZ-0285 CHG 01
3516		GZ-0294 CHG 01
		GZ-0296 CHG 01
		276-0002 CHG 01
		LF-1895 CHG 00
		362-1277 CHG 01
	B	GZ-0295 CHG 01
		LF-3467 CHG 00
		510-9149 CHG 00
		510-9150 CHG 00
		525-9193 CHG 00
	Y1	304-3139 CHG 00
	B1	304-3140 CHG 01
	1	353-9015 CHG 03
	Y	493-7431 CHG 01
		530-9690 CHG 01



SCALE 1=5

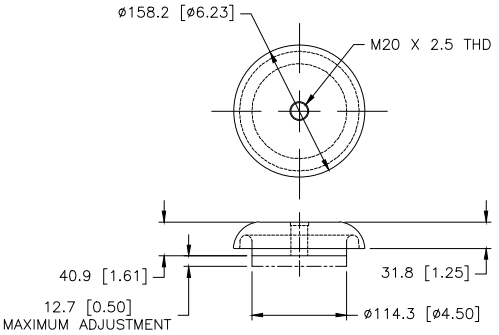
276-0001 SHOWN

SHIPPED LOOSE

REFERENCE FOOTPRINT OF ENGINE PACKAGE FOR DETAILED MOUNTING HOLE LOCATIONS

FOR RADIATOR MOUNTING:
PRICING AR 304-3140 INCLUDES 2 ISOLATORS FROM SHEET 2
PRICING AR 493-7431 INCLUDES 4 ISOLATORS FROM SHEET 2
PRICING AR 362-1277 INCLUDES 2 ISOLATORS FROM SHEET 2

MODEL	TYPE	PRICING AR
C27	6	LS-1249 CHG 02
C32		256-3170 CHG 01
		328-7171 CHG 00
3512	1	LF-1344 CHG 00
	KB	256-3166 CHG 01
		LF-1343 CHG 00
3516		LF-1894 CHG 00
		256-3168 CHG 02
	B1	LF-3412 CHG 00
		256-3169 CHG 00
	4	
C175-16	3	247-6981 CHG 00
		247-6982 CHG 00
	4	256-3178 CHG 02
3516	B	510-9144 CHG 01
		510-9145 CHG 01
C175-20	4	303-0288 CHG 01
	3	479-9998 CHG 00



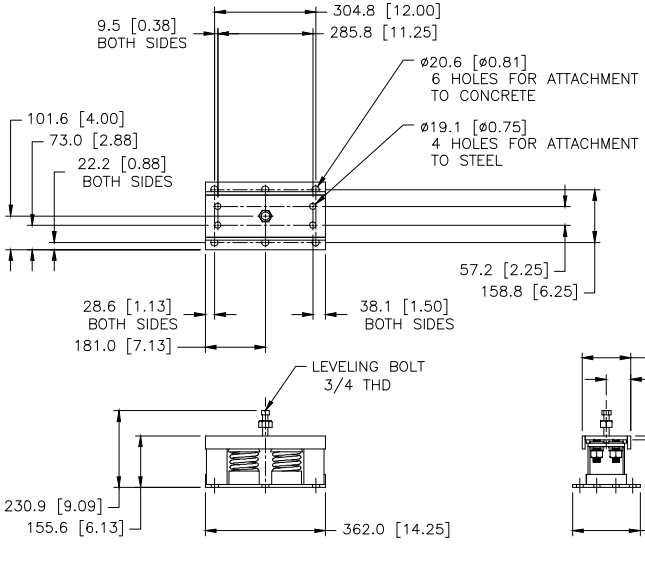
SCALE 1=2

LF-1343 SHOWN

SHIPPED LOOSE

REFERENCE FOOTPRINT OF ENGINE PACKAGE FOR DETAILED MOUNTING HOLE LOCATIONS

MODEL	TYPE	PRICING AR
C27	6	GP-1548 CHG 00
C32	–	509-9437 CHG 01
3512	1	363-2738 CHG 01
		363-2761 CHG 00
	KB	472-4754 CHG 00
		472-4755 CHG 00
		472-4756 CHG 00
		472-4757 CHG 00
		472-4758 CHG 00
3516		472-4759 CHG 00
		472-4760 CHG 00
		472-4761 CHG 01
	BY1	350-2449 CHG 01
	B1	353-9013 CHG 01
	1	353-9017 CHG 04
	Y	493-7433 CHG 00
		493-7434 CHG 00
		538-1116 CHG 00
C175-16	3	471-6562 CHG 01
		471-6563 CHG 01
	4	259-9232 CHG 04
		259-9233 CHG 04
C175-20		348-5769 CHG 03



SCALE 1=5

363-2738 SHOWN

SHIPPED LOOSE

REFERENCE FOOTPRINT OF ENGINE PACKAGE FOR DETAILED MOUNTING HOLE LOCATIONS

1E2966B IDENT
1E2733 DRAWING-AUTOCAD
1E0138W BRAND MARKINGS
1E0013 CONFIDENTIALITY
1E0012 INTERPRETATION
1E0011 INTPR & TOL
DRN L. FENG
CHK M. J. SWIFT
APPD N.P.MOUNTJOY
RECORDS IX
SCALE = 1:0
SHEET 1 OF 2
10 24SEP18
CAT CATERPILLAR INC.
INSTALLATION-ATTACHMENT
3500/C175/C32/C27-VIB ISO
424-2207 - REV W868 E

Eneria CAT	Commissioning Level:	**LEVEL 1_FAT**	Data4
	Item Number:	C001	
	Item Description:	LV GENERATOR	
	Equipment ID / Asset Tag:	A STRING GE	GISIMO S.r.l.
	Discipline:	MECHANICAL	
	Contractor / Vendor:	ENERIA	

Proprietà

DATA 4 ITALY

Progetto

DC 07
MILAN

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Cod	Data	Descrizione
	16/11/2022	

DATA 4 ITALY - DC07 Milan
Commissioning Level 1 - Grey tag
FAT GEA

PARAMETERS

IDENTIFICATION	
Customer	DATA IV
Project	DC07 MILAN - GEA
Date	21/07/2022
Eneria Department	BU DATA CENTER
Genset type	COMPACT
Genset S/N	CAT3516EHZNL00279
Power	3250 KVA
Rating	STANDBY
Eneria OT number	380305

ENGINE	MANUFACTURER :	
Type :	Theoretical Plate	Final Plate
Serial Number	ZNL00279	
AR Number	5930146	
Altitude max	2953 m	
Rack travel	10 FLS / 0 FTS	
Power : HP / KW	3032 KW	
No-load Speed	1515	
On-load Speed	1500	
Setting	N/A	

ENGINE REGULATION	
Manufacturer	CAT/ADEM5
Model	ELECTRONIQUE/EUI
Actuator Number	ECM
Serial Number	31416065VW
Regulator Number	CAN
Serial Number	N/A
Spring Number	N/A

TURBOCHARGER	
Aftercooler	CAT
Number of turbos	4
Turbos manufacturer	CAT
Serial Number	555-0590 X4

INJECTION	PUMP INJECTOR
Injector Number	5816969

ENGINE CONTROL PANEL
EMCP4.4
GENERATOR
VOLTAGE / CURRENT/ FREQUENCY
KW / KVA / KVAr / P.f.
TOTAL KW% / KVA% / KVAr%
KWh / KVArh
EXCITATION FIELD VOLTAGE / CURRENT
ENGINE :
OIL PRESSURE / COOLANT TEMPERATURE
ENGINE SPEED / BATTERY VOLTAGE
TOTAL LAUNCH / TOTAL START
TEMPERATURE ECHAPPEMENT G-D
FUEL PRESSURE / OIL PRESSURE
BOOST PRESSURE / OIL TEMPERATURE
OIL, FUEL, AIR FILTER CLOGGING
FUEL CONSUMPTION RATE

RADIATOR	
Manufacturer	N/A
Part Number	N/A
Reference	N/A
Serial Number	N/A
Power	N/A
Pulley Wheel Ratio	N/A
Belt Number	N/A

AIR-COOLER	
Manufacturer	N/A
Fan	N/A
Blades diameter	N/A
Power	N/A
Electrical Motor	N/A

AIR COOLER TEST BANCH

STARTING					
Electrical starter	Manufac.	CAT X2 349-6606	Type	24V/CW
Air starter	Manufac.	CAT X1 349-6606	Type	24V/CW
Alternator	Manufac.	CAT X1 561-2986	Volts/Amps	24V/50A

WATER HEATER			Pump		Thermostat	
Manufacturer	ENERIA					
Power	9kW	Manufac.	WILO	Manufacturer	DANFOSS
Voltage	400V	Voltage	230V	Setting	60°C

DRAWINGS	
Engine CAT N°	491-3960-03
Genset CAT N°	552-6069-01
Genset Eneria N°	E-7021-1
Genset Eneria N°	
Switchgear Eneria N	N/A
Other Eneria N°	N/A

LIQUIDS	
Fuel LHV	10150KG cal/Kg
Fuel Density	0.88 Kg/L
Coolant	TEST BENCH
Lube oil	ORIGIN

GENERATOR	MANUFACTURER :	CATERPILLAR
Type :	Theoretical Plate	Final Plate
Serial Number	4Y702036	
AR Number	585-1976	
Frame Number	N/A	
Power kVA / kW	3250 / 2600	
Duty cycle	STANDBY	
Frequency	50HZ	
Temperature Max	N/A	
Efficiency	N/A	
Regulator type	CDVR	
Reference	314-7755	
Serial Number	28116009GD	
Excitation type	PERMANENT MAGNETS	

PARAMETERS

IDENTIFICATION	
Customer	DATA IV
Project	DC07 MILAN - GEA
Date	21 juillet 2022

TEST	
Test Date	
Test Supervisor	44763

DISPLAY	Gauge
Voltmeter	0-400V
Frequencymeter	0-99HZ
Ammeter	0-5000A
Current transfo.	5000/5A
Wattmeter	0-2000 KW
Current transfo.	5000/5A
Water Temp.	CAT
Lube Oil Pressure	CAT
Lube Oil Temp.	CAT
Speed	CAT
Battery Voltage	CAT
Charge Air Pressure	CAT
Exhaust Temp.	N/A

EQUIPMENTS			
Control Panel	EMCP4.4	Battery charger	N/A
Cabinet	N/A	Ref / Serial N°	N/A
Transfer Switch	N/A	Earth Fault	N/A
Circuit Breaker	N/A	Ref	N/A
Coupler	N/A	Speed relay manuf.	EMCP4.4
Ref / Serial N°	N/A	Ref	503-4417-00
Load Sharing	N/A	Serial N°	2631E062TV
Ref / Serial N°	N/A	Starter Stop	400TR/MN
Power Return	EMCP4.4	Shut-off Valve	N/A
Ref	503-4417-00	Injection	CAT
Protection Board	EMCP4.4	Air	N/A
Ref	503-4417-00		
Serial N°	2956E580TX		

SETTINGS

DISPLAY	Théoretical Value	Tolerance	Checking
Voltage (V)	400	+/-5%	√
Frequency (Hz)	50	+/-2%	√
Current (I)	3609	+/-1%	√
Power (kVA)	2500	+/-1%	√
Water Temp. (°C)	89	+/-5%	√
LubeOil Pres. (kPa)	376	+/-5%	√
LubeOil Temp (°C)	N/A	+/-5%	/
Speed (tr/min)	1500	+/-5%	√
Battery Voltage (V)	27	+/-5%	√
Charge Air Pres. (kPa)	260	+/-5%	√
Exhaust Temp. (°C)	690	+/-5%	√

SECURITIES	Type	Level	Checking
Low Oil Pressure	SENSOR	205KPA	√
High Water Temp.	SENSOR	107°C	√
Low Oil Level	MURPHY	N/A	/
Low Coolant Level	N/A	N/A	/
High Oil Temp.	N/A	N/A	/
Overspeed	SENSOR	1770Tr/mn	√
Overcranck	CYCLES	5	√
Generator Temp.	N/A	N/A	/
Emergency Stop	PUSH BUTTON	NA	√
Over/Under Voltage	%	110/85	/
Over/Under Freq.	%	110/90	/
Overcurrent	%	105	/
Earth Protection	N/A	N/A	/
Power return	%	10	/
ALARMS			
Low Oil Pressure	SENSOR	239KPA	√
High Water Temp.	SENSOR	102°C	√
High Oil Temp.	N/A	N/A	/
Overspeed	%	105/90	/
Low Fuel Level	%	105/95	/
Low Water Temp.	SENSOR	21°C	√

COMMENTS	VISA / DATE

Eneria CAT
Moteurs et Groupes électrogènes

Witness Tests
QUAL FOR 10 / 03

IDENTIFICATION	
Customer	DATA IV
Project	DC07 MILAN - GEA
Genset S/N	CAT3516EHZNL00279

TEST	
Test Date	44763
Test Supervisor	B000018

LOAD PERFORMANCE TESTS

TIMER	
Before tests	2,6H
After tests	5,2H

TESTS PARAMETERS	
Atmospheric Pres.	758,33 mm Hg
Ambiant Temp.	27°C
Charge Air Temp	
Left Air Filter	30,5°C
Right Air Filter	33°C

FULL LOAD VALUES			
Oil Dif. Pressure	36,5 kPa	Actuator Voltage	
Fuel Dif. Pressure	N/A	No-load	N/A
Air Intake Temp.	42,8°C	Full load	N/A
Pressure Drop		Pick-up Voltage	N/A
Left Air Filter	3,0 kPa		
Right Air Filter	3,0 kPa		

VALUES

Duration (hours)	Power (kW)	Voltage (V)	Current (A)	Frequency (Hz)	Cos Ø	Excitation Voltage (V)	Charge Air Pressure (bars)		Exhaust Temp. (°C)		Oil Pressure (bars or kPa)	Water Temp (°C)	Fuel Pres. (bars or kPa)	Oil Temp. (°C)
							L	R	L	R				
15 mn	650 (25%)	400	941	50	1	16,35	N/A	30	307	320	630	82	730	86
15 mn	1300 (50%)	399	1884	50	1	15,5	N/A	114	365	375	606	83	710	88
15 mn	1950 (75%)	400	2846	50	1	22,95	N/A	260	333	330	590	84	681	88
60 mn	2600 (100%)	399	3778	50	1	28,25	N/A	335	341	331	559	87	655	95

COMMENTS	VISA / DATE

Eneria CAT
Moteurs et Groupes électrogènes

Procès Verbal
QUAL FOR 10 / 03

Fournisseur : *Supplier :*	N° du Procès Verbal : *Certificate Number :* 2022-07-002
Usine : *Works :*	Nombre de pages : *Number of sheets :* 31
Client : *Customer :* DATA IV	**PROCES VERBAL DE RECETTE DE CONFORMITE AUX STIPULATIONS D'UNE COMMANDE ETABLI PAR L'INDUSTRIEL FOURNISSEUR** ***CERTIFICATE OF TESTS OF CONFORMITY TO THE STIPULATIONS OF AN ORDER ESTABLISHED BY THE INDUSTRIAL SUPPLIER***
N° de commande : *Order N° :* 811218	
Nom du projet : *Project name :* DC07 MILAN - GEA	

Désignation *Designation*	Référence ou type *Reference or type*	Quantité *Quantity*	N° de série ou lot *Serial or batch N°*	N° de plan Drawing N°
Groupe électrogene	3516EH	1	CAT3516EHZNL00279	491-3960-03 552-6069-01 E-7021-1

N° du Procès Verbal :
Certificate Number : 2022-07-002

Nous certifions que, sauf exceptions ou dérogations énumérées ci-après, la fourniture citée ci-dessus a été fabriquée conformément aux spécifications techniques du marché, commande ou sous-commande du client et que, toutes opérations de contrôle et d'essais effectuées, la fourniture répond, SOUS TOUS SES ASPECTS, à la commande, aux spécifications particulières ci-jointes, aux plans, ainsi qu'aux normes et règlements en vigueur s'y rapportant.

We certify that, subject to exceptions or concessions listed hereafter, the supplies detailed hereover were manufactured in accordance with the technical specifications of the contract, order or sub-order, and that all inspection operations and tests having been completed, the supplies comply IN EVERY RESPECT with the order, the relevant particular specifications, drawings and relevant standards and regulations in force.

☐ sans aucune réserve ou non-conformité
without any reservation or non-conformity

☐ avec les réserves ou non-conformités suivantes
with the following reservations or non-conformity

N° du Procès Verbal :	
Certificate Number :	2022-07-002

VISAS - SIGNATURES

CONTRÔLE FOURNISSEUR *SUPPLIER'S INSPECTION*	CONTRÔLE CLIENT *CUSTOMER'S INSPECTION*
Nom et fonction : *Name and function :* Date : Signature :	Nom et fonction : *Name and function :* Date : Signature :

Eneria
R. MATHER
Service Commercial
Rue de Longpont CR 10202
91311 MONTLHÉRY
Tél. 01 69 80 22 70 - Fax 01 69 80 21 91
Siret 352 774 079 00029 - APE 4669 B

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Status

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Product Link Elite (ZNL00279)

Parameter	Value
Product ID	ZNL00279
Machine Serial Number	
Equipment ID	ZNL00279
ECM Part Number	4590786-04
ECM Serial Number	2081F537TR
Software Group Part Number	5754275-00
Software Group Release Date	Mar2019
Software Group Description	VIMS_TELEMATICS_2019_03_06
Application Software Part Number	5672205-00
Cellular Device ECM Serial Number	NA
Cellular Device ECM Hardware Part Number	NA
Cellular Radio Module Software Part Number	NA
Satellite Device ECM Serial Number	NA
Satellite Device ECM Hardware Part Number	NA
Satellite Radio Module Software Part Number	NA
Wi-Fi Radio Hardware Serial Number	NA
Wi-Fi Radio Hardware Part Number	NA
Wi-Fi Radio Software Part Number	NA

3516E Genset - ECM 1 Master ECM (ZNL00279)

Parameter	Value
Equipment ID	
Engine Serial Number	ZNL00279
ECM Serial Number	31416065VW
Software Group Part Number	6081399-00
Software Group Release Date	FEB21
Software Group Description	EP-MEUIC_50Hz_PROD_10.2

3516E Genset - ECM 2 Slave ECM (ZNL00279)

Parameter	Value
Engine Serial Number	ZNL00279

ECM Serial Number	31416092VW
Software Group Part Number	6081399-00
Software Group Release Date	FEB21
Software Group Description	EP-MEUIC_50Hz_PROD_10.2

Digital Voltage Regulator

Parameter	Value
ECM Part Number	3147755-00
ECM Serial Number	28116009GD
Software Group Part Number	3184763-01
Software Group Release Date	NOV2007
Software Group Description	Regulator Software

EMCP 4.4 (CAT00000)

Parameter	Value
ECM Part Number	5034417-00
ECM Serial Number	2631E062TV
Software Group Part Number	6053891-00
Software Group Release Date	NOV2020
Software Group Description	EMCP 4.4 English, v4.11H PROD, 11 November 2020

Digital Pyrometer #1

Parameter	Value
ECM Part Number	3434631-04
ECM Serial Number	2381D024CL
Software Group Part Number	4559451-00
Software Group Release Date	MAR2014
Software Group Description	exhgaspyro

Description	Value	Unit	Min	Max	ECM
EMCP4.4					
Engine Speed	1500	rpm	1499	1501	EMCP 4.4 (CAT00000)
Generator AC Frequency	50,0	Hz	50,0	50,0	EMCP 4.4 (CAT00000)
Generator Phase A RMS Voltage	232	Volts	231	232	EMCP 4.4 (CAT00000)
Generator Phase B RMS Voltage	231	Volts	230	231	EMCP 4.4 (CAT00000)
Generator Phase C RMS Voltage	230	Volts	230	231	EMCP 4.4 (CAT00000)

Generator Phase AB Line-Line AC RMS Voltage	401	Volts	400	401	EMCP 4.4 (CAT00000)
Generator Phase BC Line-Line AC RMS Voltage	399	Volts	398	400	EMCP 4.4 (CAT00000)
Generator Phase CA Line-Line AC RMS Voltage	400	Volts	400	401	EMCP 4.4 (CAT00000)
Generator Phase A RMS Current	941	Amps	938	941	EMCP 4.4 (CAT00000)
Generator Phase B RMS Current	940	Amps	939	941	EMCP 4.4 (CAT00000)
Generator Phase C RMS Current	944	Amps	944	947	EMCP 4.4 (CAT00000)
Generator Total Real Power	653	kW	650	655	EMCP 4.4 (CAT00000)
Generator Overall Power Factor	1,00		1,00	1,00	EMCP 4.4 (CAT00000)
Generator Total Apparent Power	652	kVA	649	654	EMCP 4.4 (CAT00000)
Generator Total Reactive Power	14	kVAr	14	14	EMCP 4.4 (CAT00000)
Generator Excitation Field Current	1,35	Amps	1,25	1,40	Digital Voltage Regulator
Generator Excitation Field Voltage	16,35	Volts	10,75	16,35	Digital Voltage Regulator

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Product Link Elite (ZNL00279)

Parameter	Value
Product ID	ZNL00279
Machine Serial Number	
Equipment ID	ZNL00279
ECM Part Number	4590786-04
ECM Serial Number	2081F537TR
Software Group Part Number	5754275-00
Software Group Release Date	Mar2019
Software Group Description	VIMS_TELEMATICS_2019_03_06
Application Software Part Number	5672205-00
Cellular Device ECM Serial Number	NA
Cellular Device ECM Hardware Part Number	NA
Cellular Radio Module Software Part Number	NA
Satellite Device ECM Serial Number	NA
Satellite Device ECM Hardware Part Number	NA
Satellite Radio Module Software Part Number	NA
Wi-Fi Radio Hardware Serial Number	NA
Wi-Fi Radio Hardware Part Number	NA
Wi-Fi Radio Software Part Number	NA

3516E Genset - ECM 1 Master ECM (ZNL00279)

Parameter	Value
Equipment ID	
Engine Serial Number	ZNL00279
ECM Serial Number	31416065VW
Software Group Part Number	6081399-00
Software Group Release Date	FEB21
Software Group Description	EP-MEUIC_50Hz_PROD_10.2

3516E Genset - ECM 2 Slave ECM (ZNL00279)

Parameter	Value
Engine Serial Number	ZNL00279

ECM Serial Number	31416092VW
Software Group Part Number	6081399-00
Software Group Release Date	FEB21
Software Group Description	EP-MEUIC_50Hz_PROD_10.2

Digital Voltage Regulator

Parameter	Value
ECM Part Number	3147755-00
ECM Serial Number	28116009GD
Software Group Part Number	3184763-01
Software Group Release Date	NOV2007
Software Group Description	Regulator Software

EMCP 4.4 (CAT00000)

Parameter	Value
ECM Part Number	5034417-00
ECM Serial Number	2631E062TV
Software Group Part Number	6053891-00
Software Group Release Date	NOV2020
Software Group Description	EMCP 4.4 English, v4.11H PROD, 11 November 2020

Digital Pyrometer #1

Parameter	Value
ECM Part Number	3434631-04
ECM Serial Number	2381D024CL
Software Group Part Number	4559451-00
Software Group Release Date	MAR2014
Software Group Description	exhgaspyro

Description	Value	Unit	Min	Max	ECM
TEMP & PRES					
Engine Speed	1501	rpm	1499	1501	3516E Genset - ECM 1 Master ECM (ZNL00279)
Engine Coolant Temperature	82	Deg C	82	82	3516E Genset - ECM 1 Master ECM (ZNL00279)
Air Inlet Temperature	22,9	Deg C	22,8	22,9	3516E Genset - ECM 1 Master ECM (ZNL00279)

Intake Manifold Air Temperature	32,8	Deg C	31,9	32,8	3516E Genset - ECM 1 Master ECM (ZNL00279)
Fuel Temperature	26	Deg C	26	26	3516E Genset - ECM 1 Master ECM (ZNL00279)
Engine Oil Temperature	86	Deg C	85	86	3516E Genset - ECM 1 Master ECM (ZNL00279)
Engine Turbocharger #1 Turbine Intake Temperature	626,0	Deg C	624,4	626,2	3516E Genset - ECM 1 Master ECM (ZNL00279)
Engine Turbocharger #2 Turbine Intake Temperature	610,2	Deg C	607,1	610,2	3516E Genset - ECM 1 Master ECM (ZNL00279)
Boost Pressure	30	kPa	30	32	3516E Genset - ECM 1 Master ECM (ZNL00279)
Engine Oil Pressure	630	kPa	630	636	3516E Genset - ECM 1 Master ECM (ZNL00279)
Fuel Pressure	730	kPa	728	731	3516E Genset - ECM 1 Master ECM (ZNL00279)
Barometric Pressure	100,5	kPa	100,5	100,5	3516E Genset - ECM 1 Master ECM (ZNL00279)
Crankcase Pressure	0,0	kPa	-0,1	0,1	3516E Genset - ECM 1 Master ECM (ZNL00279)
Fuel Consumption Rate	209,9	L/h	203,6	211,7	3516E Genset - ECM 1 Master ECM (ZNL00279)
Engine Load Factor	25	%	23	25	3516E Genset - ECM 1 Master ECM (ZNL00279)
Engine Power Derate	0	%	0	0	3516E Genset - ECM 1 Master ECM (ZNL00279)
Battery Voltage	26,5	Volts	26,0	27,0	3516E Genset - ECM 1 Master ECM (ZNL00279)
Engine Oil Filter Differential Pressure	33,0	kPa	32,5	33,5	EMCP 4.4 (CAT00000)
Air Filter #1 Restriction	0,3	kPa	0,2	0,4	3516E Genset - ECM 1 Master ECM (ZNL00279)
Air Filter #2 Restriction	0,4	kPa	0,3	0,5	3516E Genset - ECM 1 Master ECM (ZNL00279)

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Product Link Elite (ZNL00279)

Parameter	Value
Product ID	ZNL00279
Machine Serial Number	
Equipment ID	ZNL00279
ECM Part Number	4590786-04
ECM Serial Number	2081F537TR
Software Group Part Number	5754275-00
Software Group Release Date	Mar2019
Software Group Description	VIMS_TELEMATICS_2019_03_06
Application Software Part Number	5672205-00
Cellular Device ECM Serial Number	NA
Cellular Device ECM Hardware Part Number	NA
Cellular Radio Module Software Part Number	NA
Satellite Device ECM Serial Number	NA
Satellite Device ECM Hardware Part Number	NA
Satellite Radio Module Software Part Number	NA
Wi-Fi Radio Hardware Serial Number	NA
Wi-Fi Radio Hardware Part Number	NA
Wi-Fi Radio Software Part Number	NA

3516E Genset - ECM 1 Master ECM (ZNL00279)

Parameter	Value
Equipment ID	
Engine Serial Number	ZNL00279
ECM Serial Number	31416065VW
Software Group Part Number	6081399-00
Software Group Release Date	FEB21
Software Group Description	EP-MEUIC_50Hz_PROD_10.2

3516E Genset - ECM 2 Slave ECM (ZNL00279)

Parameter	Value
Engine Serial Number	ZNL00279

ECM Serial Number	31416092VW
Software Group Part Number	6081399-00
Software Group Release Date	FEB21
Software Group Description	EP-MEUIC_50Hz_PROD_10.2

Digital Voltage Regulator

Parameter	Value
ECM Part Number	3147755-00
ECM Serial Number	28116009GD
Software Group Part Number	3184763-01
Software Group Release Date	NOV2007
Software Group Description	Regulator Software

EMCP 4.4 (CAT00000)

Parameter	Value
ECM Part Number	5034417-00
ECM Serial Number	2631E062TV
Software Group Part Number	6053891-00
Software Group Release Date	NOV2020
Software Group Description	EMCP 4.4 English, v4.11H PROD, 11 November 2020

Digital Pyrometer #1

Parameter	Value
ECM Part Number	3434631-04
ECM Serial Number	2381D024CL
Software Group Part Number	4559451-00
Software Group Release Date	MAR2014
Software Group Description	exhgaspyro

Description	Value	Unit	Min	Max	ECM
EMCP4.4					
Engine Speed	1500	rpm	1499	1501	EMCP 4.4 (CAT00000)
Generator AC Frequency	50,0	Hz	50,0	50,0	EMCP 4.4 (CAT00000)
Generator Phase A RMS Voltage	231	Volts	231	231	EMCP 4.4 (CAT00000)
Generator Phase B RMS Voltage	231	Volts	230	231	EMCP 4.4 (CAT00000)
Generator Phase C RMS Voltage	230	Volts	230	231	EMCP 4.4 (CAT00000)

Generator Phase AB Line-Line AC RMS Voltage	400	Volts	400	401	EMCP 4.4 (CAT00000)
Generator Phase BC Line-Line AC RMS Voltage	399	Volts	398	399	EMCP 4.4 (CAT00000)
Generator Phase CA Line-Line AC RMS Voltage	399	Volts	399	400	EMCP 4.4 (CAT00000)
Generator Phase A RMS Current	1875	Amps	1875	1879	EMCP 4.4 (CAT00000)
Generator Phase B RMS Current	1885	Amps	1883	1887	EMCP 4.4 (CAT00000)
Generator Phase C RMS Current	1892	Amps	1892	1896	EMCP 4.4 (CAT00000)
Generator Total Real Power	1300	kW	1300	1308	EMCP 4.4 (CAT00000)
Generator Overall Power Factor	1,00		1,00	1,00	EMCP 4.4 (CAT00000)
Generator Total Apparent Power	1302	kVA	1302	1308	EMCP 4.4 (CAT00000)
Generator Total Reactive Power	43	kVAr	43	43	EMCP 4.4 (CAT00000)
Generator Excitation Field Current	1,55	Amps	1,55	1,70	Digital Voltage Regulator
Generator Excitation Field Voltage	15,50	Volts	13,85	24,35	Digital Voltage Regulator

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Product Link Elite (ZNL00279)

Parameter	Value
Product ID	ZNL00279
Machine Serial Number	
Equipment ID	ZNL00279
ECM Part Number	4590786-04
ECM Serial Number	2081F537TR
Software Group Part Number	5754275-00
Software Group Release Date	Mar2019
Software Group Description	VIMS_TELEMATICS_2019_03_06
Application Software Part Number	5672205-00
Cellular Device ECM Serial Number	NA
Cellular Device ECM Hardware Part Number	NA
Cellular Radio Module Software Part Number	NA
Satellite Device ECM Serial Number	NA
Satellite Device ECM Hardware Part Number	NA
Satellite Radio Module Software Part Number	NA
Wi-Fi Radio Hardware Serial Number	NA
Wi-Fi Radio Hardware Part Number	NA
Wi-Fi Radio Software Part Number	NA

3516E Genset - ECM 1 Master ECM (ZNL00279)

Parameter	Value
Equipment ID	
Engine Serial Number	ZNL00279
ECM Serial Number	31416065VW
Software Group Part Number	6081399-00
Software Group Release Date	FEB21
Software Group Description	EP-MEUIC_50Hz_PROD_10.2

3516E Genset - ECM 2 Slave ECM (ZNL00279)

Parameter	Value
Engine Serial Number	ZNL00279

ECM Serial Number	31416092VW
Software Group Part Number	6081399-00
Software Group Release Date	FEB21
Software Group Description	EP-MEUIC_50Hz_PROD_10.2

Digital Voltage Regulator

Parameter	Value
ECM Part Number	3147755-00
ECM Serial Number	28116009GD
Software Group Part Number	3184763-01
Software Group Release Date	NOV2007
Software Group Description	Regulator Software

EMCP 4.4 (CAT00000)

Parameter	Value
ECM Part Number	5034417-00
ECM Serial Number	2631E062TV
Software Group Part Number	6053891-00
Software Group Release Date	NOV2020
Software Group Description	EMCP 4.4 English, v4.11H PROD, 11 November 2020

Digital Pyrometer #1

Parameter	Value
ECM Part Number	3434631-04
ECM Serial Number	2381D024CL
Software Group Part Number	4559451-00
Software Group Release Date	MAR2014
Software Group Description	exhgaspyro

Description	Value	Unit	Min	Max	ECM
TEMP & PRES					
Engine Speed	1501	rpm	1499	1501	3516E Genset - ECM 1 Master ECM (ZNL00279)
Engine Coolant Temperature	82	Deg C	82	82	3516E Genset - ECM 1 Master ECM (ZNL00279)
Air Inlet Temperature	22,9	Deg C	22,8	22,9	3516E Genset - ECM 1 Master ECM (ZNL00279)

Intake Manifold Air Temperature	32,8	Deg C	31,9	32,8	3516E Genset - ECM 1 Master ECM (ZNL00279)
Fuel Temperature	26	Deg C	26	26	3516E Genset - ECM 1 Master ECM (ZNL00279)
Engine Oil Temperature	86	Deg C	85	86	3516E Genset - ECM 1 Master ECM (ZNL00279)
Engine Turbocharger #1 Turbine Intake Temperature	626,0	Deg C	624,4	626,2	3516E Genset - ECM 1 Master ECM (ZNL00279)
Engine Turbocharger #2 Turbine Intake Temperature	610,2	Deg C	607,1	610,2	3516E Genset - ECM 1 Master ECM (ZNL00279)
Boost Pressure	30	kPa	30	32	3516E Genset - ECM 1 Master ECM (ZNL00279)
Engine Oil Pressure	630	kPa	630	636	3516E Genset - ECM 1 Master ECM (ZNL00279)
Fuel Pressure	730	kPa	728	731	3516E Genset - ECM 1 Master ECM (ZNL00279)
Barometric Pressure	100,5	kPa	100,5	100,5	3516E Genset - ECM 1 Master ECM (ZNL00279)
Crankcase Pressure	0,0	kPa	-0,1	0,1	3516E Genset - ECM 1 Master ECM (ZNL00279)
Fuel Consumption Rate	209,9	L/h	203,6	211,7	3516E Genset - ECM 1 Master ECM (ZNL00279)
Engine Load Factor	25	%	23	25	3516E Genset - ECM 1 Master ECM (ZNL00279)
Engine Power Derate	0	%	0	0	3516E Genset - ECM 1 Master ECM (ZNL00279)
Battery Voltage	26,5	Volts	26,0	27,0	3516E Genset - ECM 1 Master ECM (ZNL00279)
Engine Oil Filter Differential Pressure	33,0	kPa	32,5	33,5	EMCP 4.4 (CAT00000)
Air Filter #1 Restriction	0,3	kPa	0,2	0,4	3516E Genset - ECM 1 Master ECM (ZNL00279)
Air Filter #2 Restriction	0,4	kPa	0,3	0,5	3516E Genset - ECM 1 Master ECM (ZNL00279)

Cat Electronic Technician 2022A v1.0
Status

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Product Link Elite (ZNL00279)

Parameter	Value
Product ID	ZNL00279
Machine Serial Number	
Equipment ID	ZNL00279
ECM Part Number	4590786-04
ECM Serial Number	2081F537TR
Software Group Part Number	5754275-00
Software Group Release Date	Mar2019
Software Group Description	VIMS_TELEMATICS_2019_03_06
Application Software Part Number	5672205-00
Cellular Device ECM Serial Number	NA
Cellular Device ECM Hardware Part Number	NA
Cellular Radio Module Software Part Number	NA
Satellite Device ECM Serial Number	NA
Satellite Device ECM Hardware Part Number	NA
Satellite Radio Module Software Part Number	NA
Wi-Fi Radio Hardware Serial Number	NA
Wi-Fi Radio Hardware Part Number	NA
Wi-Fi Radio Software Part Number	NA

3516E Genset - ECM 1 Master ECM (ZNL00279)

Parameter	Value
Equipment ID	
Engine Serial Number	ZNL00279
ECM Serial Number	31416065VW
Software Group Part Number	6081399-00
Software Group Release Date	FEB21
Software Group Description	EP-MEUIC_50Hz_PROD_10.2

3516E Genset - ECM 2 Slave ECM (ZNL00279)

Parameter	Value
Engine Serial Number	ZNL00279

ECM Serial Number	31416092VW
Software Group Part Number	6081399-00
Software Group Release Date	FEB21
Software Group Description	EP-MEUIC_50Hz_PROD_10.2

Digital Voltage Regulator

Parameter	Value
ECM Part Number	3147755-00
ECM Serial Number	28116009GD
Software Group Part Number	3184763-01
Software Group Release Date	NOV2007
Software Group Description	Regulator Software

EMCP 4.4 (CAT00000)

Parameter	Value
ECM Part Number	5034417-00
ECM Serial Number	2631E062TV
Software Group Part Number	6053891-00
Software Group Release Date	NOV2020
Software Group Description	EMCP 4.4 English, v4.11H PROD, 11 November 2020

Digital Pyrometer #1

Parameter	Value
ECM Part Number	3434631-04
ECM Serial Number	2381D024CL
Software Group Part Number	4559451-00
Software Group Release Date	MAR2014
Software Group Description	exhgaspyro

Description	Value	Unit	Min	Max	ECM
EMCP4.4					
Engine Speed	1500	rpm	1498	1502	EMCP 4.4 (CAT00000)
Generator AC Frequency	50,0	Hz	50,0	50,0	EMCP 4.4 (CAT00000)
Generator Phase A RMS Voltage	231	Volts	231	231	EMCP 4.4 (CAT00000)
Generator Phase B RMS Voltage	231	Volts	230	231	EMCP 4.4 (CAT00000)
Generator Phase C RMS Voltage	230	Volts	230	231	EMCP 4.4 (CAT00000)

Generator Phase AB Line-Line AC RMS Voltage	401	Volts	399	401	EMCP 4.4 (CAT00000)
Generator Phase BC Line-Line AC RMS Voltage	399	Volts	398	399	EMCP 4.4 (CAT00000)
Generator Phase CA Line-Line AC RMS Voltage	399	Volts	399	400	EMCP 4.4 (CAT00000)
Generator Phase A RMS Current	2825	Amps	2818	2829	EMCP 4.4 (CAT00000)
Generator Phase B RMS Current	2846	Amps	2839	2850	EMCP 4.4 (CAT00000)
Generator Phase C RMS Current	2868	Amps	2863	2872	EMCP 4.4 (CAT00000)
Generator Total Real Power	1968	kW	1956	1975	EMCP 4.4 (CAT00000)
Generator Overall Power Factor	1,00		1,00	1,00	EMCP 4.4 (CAT00000)
Generator Total Apparent Power	1970	kVA	1961	1974	EMCP 4.4 (CAT00000)
Generator Total Reactive Power	87	kVAr	86	87	EMCP 4.4 (CAT00000)
Generator Excitation Field Current	2,05	Amps	1,95	2,10	Digital Voltage Regulator
Generator Excitation Field Voltage	22,95	Volts	17,75	30,65	Digital Voltage Regulator

Cat Electronic Technician 2022A v1.0
Status

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Product Link Elite (ZNL00279)

Parameter	Value
Product ID	ZNL00279
Machine Serial Number	
Equipment ID	ZNL00279
ECM Part Number	4590786-04
ECM Serial Number	2081F537TR
Software Group Part Number	5754275-00
Software Group Release Date	Mar2019
Software Group Description	VIMS_TELEMATICS_2019_03_06
Application Software Part Number	5672205-00
Cellular Device ECM Serial Number	NA
Cellular Device ECM Hardware Part Number	NA
Cellular Radio Module Software Part Number	NA
Satellite Device ECM Serial Number	NA
Satellite Device ECM Hardware Part Number	NA
Satellite Radio Module Software Part Number	NA
Wi-Fi Radio Hardware Serial Number	NA
Wi-Fi Radio Hardware Part Number	NA
Wi-Fi Radio Software Part Number	NA

3516E Genset - ECM 1 Master ECM (ZNL00279)

Parameter	Value
Equipment ID	
Engine Serial Number	ZNL00279
ECM Serial Number	31416065VW
Software Group Part Number	6081399-00
Software Group Release Date	FEB21
Software Group Description	EP-MEUIC_50Hz_PROD_10.2

3516E Genset - ECM 2 Slave ECM (ZNL00279)

Parameter	Value
Engine Serial Number	ZNL00279

ECM Serial Number	31416065VW
Software Group Part Number	6081399-00
Software Group Release Date	FEB21
Software Group Description	EP-MEUIC_50Hz_PROD_10.2

Digital Voltage Regulator

Parameter	Value
ECM Part Number	3147755-00
ECM Serial Number	28116009GD
Software Group Part Number	3184763-01
Software Group Release Date	NOV2007
Software Group Description	Regulator Software

Digital Pyrometer #1

Parameter	Value
ECM Part Number	3434631-04
ECM Serial Number	2381D024CL
Software Group Part Number	4559451-00
Software Group Release Date	MAR2014
Software Group Description	exhgaspyro

EMCP 4.4 (CAT00000)

Parameter	Value
ECM Part Number	5034417-00
ECM Serial Number	2631E062TV
Software Group Part Number	6053891-00
Software Group Release Date	NOV2020
Software Group Description	EMCP 4.4 English, v4.11H PROD, 11 November 2020

Description	Value	Unit	Min	Max	ECM
TEMP & PRES					
Engine Speed	1501	rpm	1499	1501	3516E Genset - ECM 1 Master ECM (ZNL00279)
Engine Coolant Temperature	84	Deg C	84	84	3516E Genset - ECM 1 Master ECM (ZNL00279)
Air Inlet Temperature	31,5	Deg C	31,5	31,5	3516E Genset - ECM 1 Master ECM (ZNL00279)

Intake Manifold Air Temperature	44,5	Deg C	44,3	44,5	3516E Genset - ECM 1 Master ECM (ZNL00279)
Fuel Temperature	34	Deg C	34	34	3516E Genset - ECM 1 Master ECM (ZNL00279)
Engine Oil Temperature	88	Deg C	88	88	3516E Genset - ECM 1 Master ECM (ZNL00279)
Engine Turbocharger #1 Turbine Intake Temperature	674,5	Deg C	673,6	674,6	3516E Genset - ECM 1 Master ECM (ZNL00279)
Engine Turbocharger #2 Turbine Intake Temperature	660,8	Deg C	659,8	661,0	3516E Genset - ECM 1 Master ECM (ZNL00279)
Boost Pressure	260	kPa	256	260	3516E Genset - ECM 1 Master ECM (ZNL00279)
Engine Oil Pressure	590	kPa	589	591	3516E Genset - ECM 1 Master ECM (ZNL00279)
Fuel Pressure	681	kPa	676	683	3516E Genset - ECM 1 Master ECM (ZNL00279)
Barometric Pressure	100,5	kPa	100,5	100,5	3516E Genset - ECM 1 Master ECM (ZNL00279)
Crankcase Pressure	0,3	kPa	0,2	0,3	3516E Genset - ECM 1 Master ECM (ZNL00279)
Fuel Consumption Rate	558,4	L/h	549,9	563,1	3516E Genset - ECM 1 Master ECM (ZNL00279)
Engine Load Factor	71	%	70	72	3516E Genset - ECM 1 Master ECM (ZNL00279)
Engine Power Derate	0	%	0	0	3516E Genset - ECM 1 Master ECM (ZNL00279)
Battery Voltage	27,0	Volts	26,5	27,0	3516E Genset - ECM 1 Master ECM (ZNL00279)
Engine Oil Filter Differential Pressure	34,5	kPa	34,0	34,5	EMCP 4.4 (CAT00000)
Air Filter #1 Restriction	2,2	kPa	2,1	2,2	3516E Genset - ECM 1 Master ECM (ZNL00279)
Air Filter #2 Restriction	2,4	kPa	2,3	2,5	3516E Genset - ECM 1 Master ECM (ZNL00279)

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Status

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Product Link Elite (ZNL00279)

Parameter	Value
Product ID	ZNL00279
Machine Serial Number	
Equipment ID	ZNL00279
ECM Part Number	4590786-04
ECM Serial Number	2081F537TR
Software Group Part Number	5754275-00
Software Group Release Date	Mar2019
Software Group Description	VIMS_TELEMATICS_2019_03_06
Application Software Part Number	5672205-00
Cellular Device ECM Serial Number	NA
Cellular Device ECM Hardware Part Number	NA
Cellular Radio Module Software Part Number	NA
Satellite Device ECM Serial Number	NA
Satellite Device ECM Hardware Part Number	NA
Satellite Radio Module Software Part Number	NA
Wi-Fi Radio Hardware Serial Number	NA
Wi-Fi Radio Hardware Part Number	NA
Wi-Fi Radio Software Part Number	NA

3516E Genset - ECM 1 Master ECM (ZNL00279)

Parameter	Value
Equipment ID	
Engine Serial Number	ZNL00279
ECM Serial Number	31416065VW
Software Group Part Number	6081399-00
Software Group Release Date	FEB21
Software Group Description	EP-MEUIC_50Hz_PROD_10.2

3516E Genset - ECM 2 Slave ECM (ZNL00279)

Parameter	Value
Engine Serial Number	ZNL00279

ECM Serial Number	31416092VW
Software Group Part Number	6081399-00
Software Group Release Date	FEB21
Software Group Description	EP-MEUIC_50Hz_PROD_10.2

Digital Voltage Regulator

Parameter	Value
ECM Part Number	3147755-00
ECM Serial Number	28116009GD
Software Group Part Number	3184763-01
Software Group Release Date	NOV2007
Software Group Description	Regulator Software

EMCP 4.4 (CAT00000)

Parameter	Value
ECM Part Number	5034417-00
ECM Serial Number	2631E062TV
Software Group Part Number	6053891-00
Software Group Release Date	NOV2020
Software Group Description	EMCP 4.4 English, v4.11H PROD, 11 November 2020

Digital Pyrometer #1

Parameter	Value
ECM Part Number	3434631-04
ECM Serial Number	2381D024CL
Software Group Part Number	4559451-00
Software Group Release Date	MAR2014
Software Group Description	exhgaspyro

Description	Value	Unit	Min	Max	ECM
EMCP4.4					
Engine Speed	1500	rpm	1498	1501	EMCP 4.4 (CAT00000)
Generator AC Frequency	50,0	Hz	50,0	50,0	EMCP 4.4 (CAT00000)
Generator Phase A RMS Voltage	231	Volts	231	231	EMCP 4.4 (CAT00000)
Generator Phase B RMS Voltage	231	Volts	230	231	EMCP 4.4 (CAT00000)
Generator Phase C RMS Voltage	230	Volts	230	230	EMCP 4.4 (CAT00000)

Generator Phase AB Line-Line AC RMS Voltage	401	Volts	400	401	EMCP 4.4 (CAT00000)
Generator Phase BC Line-Line AC RMS Voltage	399	Volts	398	399	EMCP 4.4 (CAT00000)
Generator Phase CA Line-Line AC RMS Voltage	398	Volts	398	399	EMCP 4.4 (CAT00000)
Generator Phase A RMS Current	3744	Amps	3740	3747	EMCP 4.4 (CAT00000)
Generator Phase B RMS Current	3785	Amps	3774	3785	EMCP 4.4 (CAT00000)
Generator Phase C RMS Current	3806	Amps	3806	3817	EMCP 4.4 (CAT00000)
Generator Total Real Power	2599	kW	2599	2620	EMCP 4.4 (CAT00000)
Generator Overall Power Factor	1,00		1,00	1,00	EMCP 4.4 (CAT00000)
Generator Total Apparent Power	2611	kVA	2608	2622	EMCP 4.4 (CAT00000)
Generator Total Reactive Power	143	kVAr	143	144	EMCP 4.4 (CAT00000)
Generator Excitation Field Current	2,60	Amps	2,60	2,75	Digital Voltage Regulator
Generator Excitation Field Voltage	28,25	Volts	23,70	33,70	Digital Voltage Regulator

Cat Electronic Technician 2022A v1.0
Status

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Product Link Elite (ZNL00279)

Parameter	Value
Product ID	ZNL00279
Machine Serial Number	
Equipment ID	ZNL00279
ECM Part Number	4590786-04
ECM Serial Number	2081F537TR
Software Group Part Number	5754275-00
Software Group Release Date	Mar2019
Software Group Description	VIMS_TELEMATICS_2019_03_06
Application Software Part Number	5672205-00
Cellular Device ECM Serial Number	NA
Cellular Device ECM Hardware Part Number	NA
Cellular Radio Module Software Part Number	NA
Satellite Device ECM Serial Number	NA
Satellite Device ECM Hardware Part Number	NA
Satellite Radio Module Software Part Number	NA
Wi-Fi Radio Hardware Serial Number	NA
Wi-Fi Radio Hardware Part Number	NA
Wi-Fi Radio Software Part Number	NA

3516E Genset - ECM 1 Master ECM (ZNL00279)

Parameter	Value
Equipment ID	
Engine Serial Number	ZNL00279
ECM Serial Number	31416065VW
Software Group Part Number	6081399-00
Software Group Release Date	FEB21
Software Group Description	EP-MEUIC_50Hz_PROD_10.2

3516E Genset - ECM 2 Slave ECM (ZNL00279)

Parameter	Value
Engine Serial Number	ZNL00279

ECM Serial Number	31416092VW
Software Group Part Number	6081399-00
Software Group Release Date	FEB21
Software Group Description	EP-MEUIC_50Hz_PROD_10.2

Digital Voltage Regulator

Parameter	Value
ECM Part Number	3147755-00
ECM Serial Number	28116009GD
Software Group Part Number	3184763-01
Software Group Release Date	NOV2007
Software Group Description	Regulator Software

EMCP 4.4 (CAT00000)

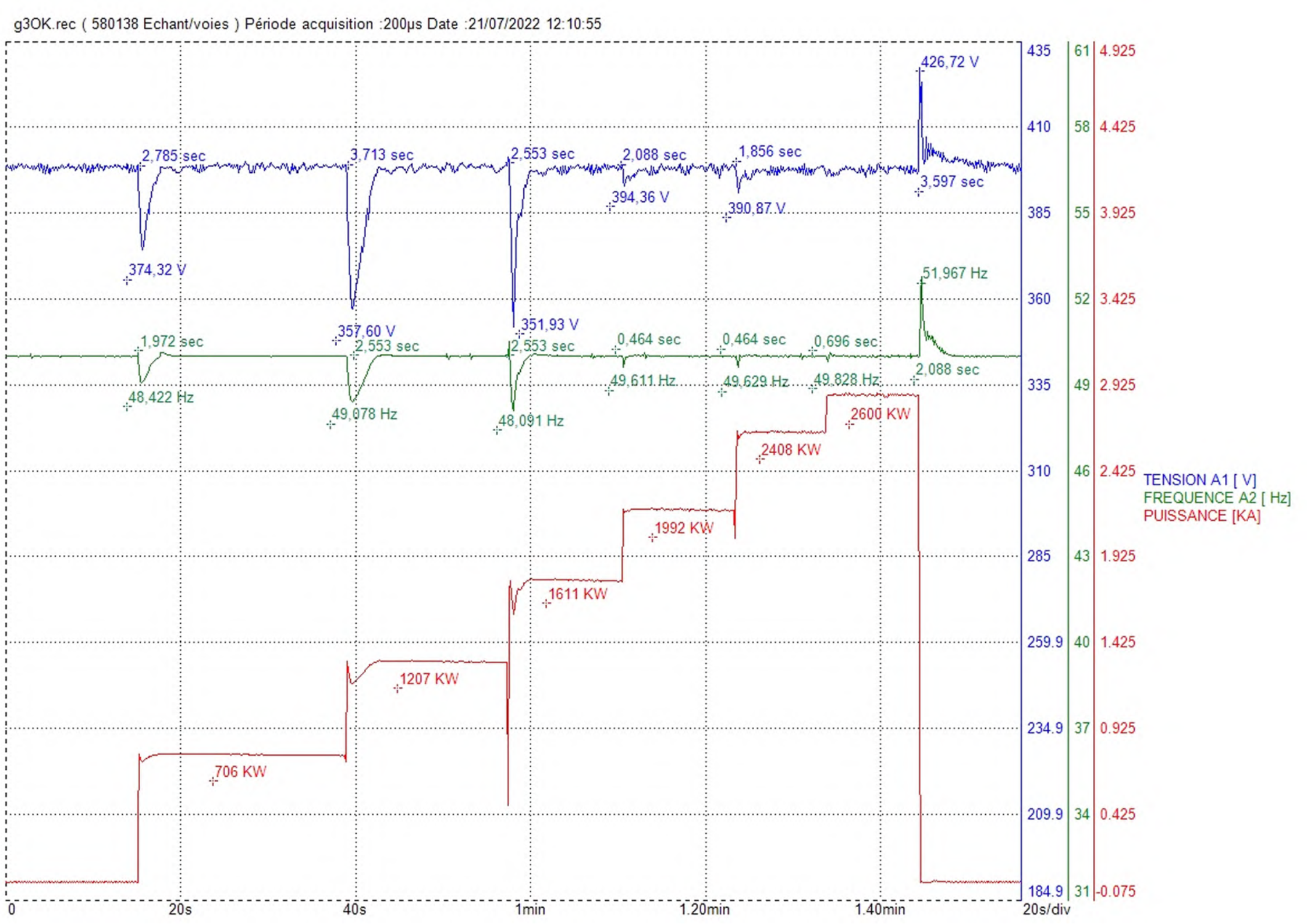
Parameter	Value
ECM Part Number	5034417-00
ECM Serial Number	2631E062TV
Software Group Part Number	6053891-00
Software Group Release Date	NOV2020
Software Group Description	EMCP 4.4 English, v4.11H PROD, 11 November 2020

Digital Pyrometer #1

Parameter	Value
ECM Part Number	3434631-04
ECM Serial Number	2381D024CL
Software Group Part Number	4559451-00
Software Group Release Date	MAR2014
Software Group Description	exhgaspyro

Description	Value	Unit	Min	Max	ECM
TEMP & PRES					
Engine Speed	1501	rpm	1498	1502	3516E Genset - ECM 1 Master ECM (ZNL00279)
Engine Coolant Temperature	87	Deg C	87	87	3516E Genset - ECM 1 Master ECM (ZNL00279)
Air Inlet Temperature	29,5	Deg C	29,4	29,6	3516E Genset - ECM 1 Master ECM (ZNL00279)

Intake Manifold Air Temperature	42,8	Deg C	42,6	43,0	3516E Genset - ECM 1 Master ECM (ZNL00279)
Fuel Temperature	29	Deg C	29	29	3516E Genset - ECM 1 Master ECM (ZNL00279)
Engine Oil Temperature	95	Deg C	95	95	3516E Genset - ECM 1 Master ECM (ZNL00279)
Engine Turbocharger #1 Turbine Intake Temperature	688,3	Deg C	686,4	688,6	3516E Genset - ECM 1 Master ECM (ZNL00279)
Engine Turbocharger #2 Turbine Intake Temperature	668,8	Deg C	667,3	669,4	3516E Genset - ECM 1 Master ECM (ZNL00279)
Boost Pressure	335	kPa	332	338	3516E Genset - ECM 1 Master ECM (ZNL00279)
Engine Oil Pressure	559	kPa	556	560	3516E Genset - ECM 1 Master ECM (ZNL00279)
Fuel Pressure	655	kPa	648	658	3516E Genset - ECM 1 Master ECM (ZNL00279)
Barometric Pressure	100,5	kPa	100,5	100,5	3516E Genset - ECM 1 Master ECM (ZNL00279)
Crankcase Pressure	0,3	kPa	0,2	0,3	3516E Genset - ECM 1 Master ECM (ZNL00279)
Fuel Consumption Rate	697,6	L/h	685,9	709,4	3516E Genset - ECM 1 Master ECM (ZNL00279)
Engine Load Factor	91	%	89	92	3516E Genset - ECM 1 Master ECM (ZNL00279)
Engine Power Derate	0	%	0	0	3516E Genset - ECM 1 Master ECM (ZNL00279)
Battery Voltage	26,5	Volts	26,5	27,0	3516E Genset - ECM 1 Master ECM (ZNL00279)
Engine Oil Filter Differential Pressure	36,5	kPa	36,5	37,0	EMCP 4.4 (CAT00000)
Air Filter #1 Restriction	3,0	kPa	2,7	3,0	3516E Genset - ECM 1 Master ECM (ZNL00279)
Air Filter #2 Restriction	3,0	kPa	3,0	3,2	3516E Genset - ECM 1 Master ECM (ZNL00279)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2,785 sec
374,32 V
3,713 sec
357,60 V
2,553 sec
351,93 V
2,088 sec
394,36 V
1,856 sec
390,87 V
426,72 V
3,597 sec
1,972 sec
48,422 Hz
2,553 sec
49,078 Hz
2,553 sec
48,091 Hz
0,464 sec
49,611 Hz
0,464 sec
49,629 Hz
0,696 sec
49,828 Hz
51,967 Hz
2,088 sec
706 KW
1207 KW
1611 KW
1992 KW
2408 KW
2600 KW
435
410
385
360
335
310
285
259.9
234.9
209.9
184.9
61
58
55
52
49
46
43
40
37
34
31
4.925
4.425
3.925
3.425
2.925
2.425
1.925
1.425
0.925
0.425
-0.075
TENSION A1 [V]
FREQUENCE A2 [Hz]
PUISSANCE [KA]
0
20s
40s
1min
1.20min
1.40min
20s/div

Eneria CAT	Commissioning Level:	LEVEL 1_FAT	Data4
	Item Number:	C001	
	Item Description:	LV GENERATOR	
	Equipment ID / Asset Tag:	A STRING GE	GISIMO s.r.l.
	Discipline:	MECHANICAL	
	Contractor / Vendor:	ENERIA	

LAST PAGE

LEVEL 1_FAT	ENERIA	GISIMO/IMOGIS	CX AGENT
Name:	Alexis Gouygou		
Date:	28/10/2022		
Signature	Gouygou		

Proprietà

DATA 4 ITALY

Progetto

DC 07
MILAN

Supervisore delegato del committente	**GIS.IMO S.r.l.** centro direzionale quattrotorri 06132 PERUGIA	Tél. : +39 075 517 29 83 Fax : +39 075 518 12 88
Assistente del committente	**GARRETTI ASSOCIATI S.r.l.** via Trieste, 9 - 20146 MILANO www.garrettiassociati.it	Tél. : +39 02 430 6931 Fax : +39 02 480 170 51
Progetto architettonico	**GARRETTI ASSOCIATI S.r.l.** via Trieste, 9 - 20146 MILANO www.garrettiassociati.it	Tél. : +39 02 430 6931 Fax : +39 02 480 170 51
Opere edili e prefabbricati	**GENERALE PREFABBRICATI S.p.a** centro direzionale quattrotorri 06132 PERUGIA www.generaleprefabbricatispa.com	Tél. : +39 075 517 29 83 Fax : +39 075 518 12 88
Impianti meccanici	**OMEGA CONCEPT IMPIANTI E SISTEMI S.p.a.** Via Chiese, 72 - 20126 - MILANO www.engie-axima.fr	Tél. : +39 02 8180951 Fax : +39 02 8135163
impianti elettrici/dati	**ENGIE CONTRACTING ITALIA S.r.l.** Via Chiese, 72 - 20126 - MILANO www.engie.com	Tél. : +39 02 94399262 Fax : +39 02 94399655
	SCHNEIDER ELECTRIC S.p.A. Via Circonvallazione Est, 1 - 24040 STEZZANO (BG) www.schneider-electric.com	Tél. : +39 0354151111 Fax : +39 0354153200
	ENERIA Rue de Longpont - BP 10202 - 91311 MONTLHERY Cedex - FRANCE www.eneria.fr	Tél. : +33 (0) 169802100 Fax : +33 (0) 169802150
Progettazione antincendio	**STUDIO TECNICO ZACCARELLI S.r.l.** via Ludovico il Moro, 17 - 20143 MILANO www.studiozaccarelli.it	Tél. : +39 02 891 200 81 Fax : +39 02 813 962 8
Supervisione	**ITALSOCOTEC S.p.a.** Via Pontaccio,12/A- 20121 Milano italsocotec@italsocotec.it	Tél. : +39 02 89051500 Fax : +39 02 89051501

Cod	Data	Descrizione
	13/10/2022	

DATA 4 ITALY - DC07 Milan
Commissioning Level 1 - Grey tag
FAT GEB

PARAMETERS

IDENTIFICATION	
Customer	DATA4
Project	DC07 MILAN GEB
Date	01/09/2022
Eneria Department	BU DATA CENTER
Genset type	3516EHD
Genset S/N	CAT3516EVZNL00276
Power	3250 kVA / 2600 kW
Rating	STANDBY
Eneria OT number	380303

ENGINE	MANUFACTURER :	
Type :	Theoretical Plate	Final Plate
Serial Number	ZNL00276	
AR Number	5930146	
Altitude max	2953 m	
Rack travel	FLS(8) / FTS(0)	
Power : HP / KW	3032 kW	
No-load Speed	1515	
On-load Speed	1500	
Setting	N/A	

ENGINE REGULATION	
Manufacturer	CAT ADEM5E4
Model	ELECTRONIQUE/EUI
Actuator Number	ECM
Serial Number	25216493VW
Regulator Number	CAN
Serial Number	N/A
Spring Number	N/A

TURBOCHARGER	
Aftercooler	CAT
Number of turbos	4
Turbos manufacturer	CAT
Serial Number	555-0590 X4

INJECTION	PUMP INJECTOR
Injector Number	5816969

ENGINE CONTROL PANEL
EMCP4.4
GENERATOR
VOLTAGE / CURRENT/ FREQUENCY
KW / KVA / KVAr / P.f.
TOTAL KW% / KVA% / KVAr%
KWh / KVArh
EXCITATION FIELD VOLTAGE / CURRENT
ENGINE :
OIL PRESSURE / COOLANT TEMPERATURE
ENGINE SPEED / BATTERY VOLTAGE
TOTAL LAUNCH / TOTAL START
TEMPERATURE ECHAPPEMENT G-D
FUEL PRESSURE / OIL PRESSURE
BOOST PRESSURE / OIL TEMPERATURE
OIL, FUEL, AIR FILTER CLOGGING
FUEL CONSUMPTION RATE

RADIATOR	
Manufacturer	CAT
Part Number	575-1571
Reference	N/A
Serial Number	25213236
Power	N/A
Pulley Wheel Ratio	N/A
Belt Number	N/A

AIR-COOLER	
Manufacturer	N/A
Fan	N/A
Blades diameter	N/A
Power	N/A
Electrical Motor	N/A

AIR COOLER TEST BANCH

STARTING					
Main starter	Manufac.	CAT X2 349-6606	Type	24V/CW
Secondary starter	Manufac.	CAT X1 349-6606	Type	24V/CW
Alternator	Manufac.	CAT X1 561-2986	Volts/Amps	24V/50A

WATER HEATER			Pump		Thermostat	
Manufacturer	ENERIA					
Power	9kW	Manufac.	WILO	Manufacturer	DANFOSS
Voltage	400V	Voltage	230V	Setting	60°C

DRAWINGS	
Engine CAT N°	491-3960
Genset CAT N°	552-6069
Genset Eneria N°	E-7021-1
Genset Eneria N°	N/A
Switchgear Eneria N	N/A
Other Eneria N°	N/A

LIQUIDS	
Fuel LHV	10150KG cal/Kg
Fuel Density	0.88 Kg/L
Coolant	TEST BENCH
Lube oil	ORIGIN

GENERATOR	MANUFACTURER :	CATERPILLAR
Type :	Theoretical Plate	Final Plate
Serial Number	4Y702034	
AR Number	585-1976	
Frame Number	N/A	
Power kVA / kW	3250/2600	
Duty cycle	STANDBY	
Frequency	50HZ	
Temperature Max	150	
Efficiency	N/A	
Regulator type	CDVR	
Reference	314-7755	
Serial Number	22316013GD	
Excitation type	PERMANENT MAGNETS	

PARAMETERS

IDENTIFICATION	
Customer	DATA4
Project	DC07 MILAN GEB
Date	1 septembre 2022

TEST	
Test Date	01/09/2022
Test Supervisor	B200867

DISPLAY	Gauge
Voltmeter	0-400V
Frequencymeter	0-99HZ
Ammeter	0-5000A
Current transfo.	5000/5A
Wattmeter	0-2000 KW
Current transfo.	5000/5A
Water Temp.	CAT
Lube Oil Pressure	CAT
Lube Oil Temp.	CAT
Speed	CAT
Battery Voltage	CAT
Charge Air Pressure	CAT
Exhaust Temp.	N/A

EQUIPMENTS			
Control Panel	EMCP 4.4	Battery charger	N/A
Cabinet	N/A	Ref / Serial N°	N/A
Transfer Switch	N/A	Earth Fault	N/A
Circuit Breaker	N/A	Ref	N/A
Coupler	N/A	Speed relay manuf.	EMCP 4.4
Ref / Serial N°	N/A	Ref	503-4417-02
Load Sharing	N/A	Serial N°	2631E020TV
Ref / Serial N°	N/A	Starter Stop	400TR/MN
Power Return	EMCP 4.4	Shut-off Valve	N/A
Ref	503-4417-02	Injection	CAT
Protection Board	EMCP 4.4	Air	N/A
Ref	503-4417-02		
Serial N°	2631E020TV		

SETTINGS

DISPLAY	Théoretical Value	Tolerance	Checking
Voltage (V)	400	+/-5%	√
Frequency (Hz)	50	+/-2%	√
Current (I)	3609	+/-1%	√
Power (kVA)	2500	+/-1%	√
Water Temp. (°C)	89	+/-5%	√
LubeOil Pres. (kPa)	376	+/-5%	√
LubeOil Temp (°C)	N/A	+/-5%	/
Speed (tr/min)	1500	+/-5%	√
Battery Voltage (V)	27	+/-5%	√
Charge Air Pres. (kPa)	260	+/-5%	√
Exhaust Temp. (°C)	690	+/-5%	√

SECURITIES	Type	Level	Checking
Low Oil Pressure	SENSOR	205KPA	√
High Water Temp.	SENSOR	107°C	√
Low Oil Level	MURPHY	N/A	/
Low Coolant Level	N/A	N/A	/
High Oil Temp.	N/A	N/A	/
Overspeed	SENSOR	1770Tr/mn	√
Overcranck	CYCLES	5	√
Generator Temp.	N/A	N/A	/
Emergency Stop	PUSH BUTTON	NA	√
Over/Under Voltage	%	110/85	/
Over/Under Freq.	%	110/90	/
Overcurrent	%	105	/
Earth Protection	N/A	N/A	/
Power return	%	10	/
ALARMS			
Low Oil Pressure	SENSOR	239KPA	√
High Water Temp.	SENSOR	102°C	√
High Oil Temp.	N/A	N/A	/
Overspeed	%	105/90	/
Low Fuel Level	%	105/95	/
Low Water Temp.	SENSOR	21°C	√

COMMENTS	VISA / DATE

Eneria CAT
Moteurs et Groupes électrogènes

Witness Tests
QUAL FOR 10 / 03

IDENTIFICATION	
Customer	DATA4
Project	DC07 MILAN GEB
Genset S/N	CAT3516EVZNL00276

TEST	
Test Date	1 septembre 2022
Test Supervisor	B200867

LOAD PERFORMANCE TESTS

TIMER	
Before tests	0,7 H
After tests	4,7 H

TESTS PARAMETERS	
Atmospheric Pres.	1005 mm Hg
Ambiant Temp.	27°C
Charge Air Temp	
Left Air Filter	33°C
Right Air Filter	33°C

FULL LOAD VALUES			
Oil Dif. Pressure	35 kPa	Actuator Voltage	
Fuel Dif. Pressure	N/A kPa	No-load	N/A
Air Intake Temp.	54°C	Full load	N/A
Pressure Drop		Pick-up Voltage	N/A
Left Air Filter	3,4 kPa		
Right Air Filter	3,7 kPa		

VALUES

Duration (hours)	Power (kW)	Voltage (V)	Current (A)	Frequency (Hz)	Cos Ø	Excitation Voltage (V)	Charge Air Pressure (bars)		Exhaust Temp. (°C)		Oil Pressure (bars or kPa)	Water Temp (°C)	Fuel Pres. (bars or kPa)	Oil Temp. (°C)
							L	R	L	R				
15 mn	650 (25%)	400	943	50	1	23,9	/	31	631	618	610	83	740	88
15 mn	1300 (50%)	399	1890	50	1	21	/	114	717	704	593	50	706	90
15 mn	1950 (75%)	399	2836	50	1	19,7	/	261	666	658	566	87	683	94
60 mn	2600 (100%)	399	4176	50	0,9	20,25	/	339	701	688	524	100	650	107

COMMENTS	VISA / DATE

Eneria CAT
Moteurs et Groupes électrogènes

Procès Verbal
QUAL FOR 10 / 03

Fournisseur : *Supplier :*	N° du Procès Verbal : *Certificate Number :* 2022-08-006
Usine : *Works :*	Nombre de pages : *Number of sheets :*
Client : *Customer :* DATA4	**PROCES VERBAL DE RECETTE DE CONFORMITE AUX STIPULATIONS D'UNE COMMANDE ETABLI PAR L'INDUSTRIEL FOURNISSEUR** ***CERTIFICATE OF TESTS OF CONFORMITY TO THE STIPULATIONS OF AN ORDER ESTABLISHED BY THE INDUSTRIAL SUPPLIER***
N° de commande : *Order N° :* 380303	
Nom du projet : *Project name :* DC07 MILAN GEB	

Désignation *Designation*	Référence ou type *Reference or type*	Quantité *Quantity*	N° de série ou lot *Serial or batch N°*	N° de plan Drawing N°
Groupe électrogene	3516EHD	1	CAT3516EVZNL00276	491-3960 552-6069 E-7021-1

N° du Procès Verbal :
Certificate Number : 2022-08-006

Nous certifions que, sauf exceptions ou dérogations énumérées ci-après, la fourniture citée ci-dessus a été fabriquée conformément aux spécifications techniques du marché, commande ou sous-commande du client et que, toutes opérations de contrôle et d'essais effectuées, la fourniture répond, SOUS TOUS SES ASPECTS, à la commande, aux spécifications particulières ci-jointes, aux plans, ainsi qu'aux normes et règlements en vigueur s'y rapportant.

We certify that, subject to exceptions or concessions listed hereafter, the supplies detailed hereover were manufactured in accordance with the technical specifications of the contract, order or sub-order, and that all inspection operations and tests having been completed, the supplies comply IN EVERY RESPECT with the order, the relevant particular specifications, drawings and relevant standards and regulations in force.

☐ sans aucune réserve ou non-conformité
without any reservation or non-conformity

☐ avec les réserves ou non-conformités suivantes
with the following reservations or non-conformity

Eneria CAT
Moteurs et Groupes électrogènes

Procès Verbal
QUAL FOR 10 / 03

N° du Procès Verbal :
Certificate Number : 2022-08-006

VISAS - SIGNATURES

CONTRÔLE FOURNISSEUR *SUPPLIER'S INSPECTION*	CONTRÔLE CLIENT *CUSTOMER'S INSPECTION*
Nom et fonction : R. MATTER *Name and function :* Responsable pièces Date : 13/10/2022 Signature :	Nom et fonction : *Name and function :* Date : Signature :

Eneria
Service Commercial
Rue de Longpont - BP 10202
91311 MONTLHERY
Tél. 01 69 80 22 70 - Fax 01 69 80 21 90
Siret 352 774 079 00028 APE 4669 B

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Status

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Comments

650 KWe

Product Link Elite (ZNL00276)

Parameter	Value
Product ID	ZNL00276
Machine Serial Number	
Equipment ID	ZNL00276
ECM Part Number	4590786-04
ECM Serial Number	2081F261TR
Software Group Part Number	5754275-00
Software Group Release Date	Mar2019
Software Group Description	VIMS_TELEMATICS_2019_03_06
Application Software Part Number	5672205-00
Cellular Device ECM Serial Number	NA
Cellular Device ECM Hardware Part Number	NA
Cellular Radio Module Software Part Number	NA
Satellite Device ECM Serial Number	NA
Satellite Device ECM Hardware Part Number	NA
Satellite Radio Module Software Part Number	NA
Wi-Fi Radio Hardware Serial Number	NA
Wi-Fi Radio Hardware Part Number	NA
Wi-Fi Radio Software Part Number	NA

3516E Genset - ECM 1 Master ECM (ZNL00276)

Parameter	Value
Equipment ID	
Engine Serial Number	ZNL00276
ECM Serial Number	28418176VW
Software Group Part Number	6081399-00
Software Group Release Date	FEB21
Software Group Description	EP-MEUIC_50Hz_PROD_10.2

3516E Genset - ECM 2 Slave ECM (ZNL00276)

Parameter	Value
Engine Serial Number	ZNL00276
ECM Serial Number	31416182VW

Software Group Part Number	6081399-00
Software Group Release Date	FEB21
Software Group Description	EP-MEUIC_50Hz_PROD_10.2

Digital Voltage Regulator

Parameter	Value
ECM Part Number	3147755-00
ECM Serial Number	22316013GD
Software Group Part Number	3184763-01
Software Group Release Date	NOV2007
Software Group Description	Regulator Software

Digital Pyrometer #1

Parameter	Value
ECM Part Number	3434631-04
ECM Serial Number	2951D024CL
Software Group Part Number	4559451-00
Software Group Release Date	MAR2014
Software Group Description	exhgaspyro

EMCP 4.4 (CAT00000)

Parameter	Value
ECM Part Number	5034417-00
ECM Serial Number	2631E020TV
Software Group Part Number	6053891-00
Software Group Release Date	NOV2020
Software Group Description	EMCP 4.4 English, v4.11H PROD, 11 November 2020

Description	Value	Unit	Min	Max	ECM
TEMP & PRESSION					
Engine Speed	1499	rpm	1499	1501	3516E Genset - ECM 1 Master ECM (ZNL00276)
Engine Coolant Temperature	83	Deg C	83	83	3516E Genset - ECM 1 Master ECM (ZNL00276)
Air Inlet Temperature	23,8	Deg C	23,8	23,9	3516E Genset - ECM 1 Master ECM (ZNL00276)
Intake Manifold Air Temperature	38,8	Deg C	38,7	38,8	3516E Genset - ECM 1 Master ECM (ZNL00276)
Fuel Temperature	28	Deg C	28	28	3516E Genset - ECM 1 Master ECM (ZNL00276)

Engine Oil Temperature	88	Deg C	88	88	3516E Genset - ECM 1 Master ECM (ZNL00276)
Engine Turbocharger #1 Turbine Intake Temperature	631,8	Deg C	631,3	632,0	3516E Genset - ECM 1 Master ECM (ZNL00276)
Engine Turbocharger #2 Turbine Intake Temperature	618,7	Deg C	618,2	619,1	3516E Genset - ECM 1 Master ECM (ZNL00276)
Boost Pressure	31	kPa	30	32	3516E Genset - ECM 1 Master ECM (ZNL00276)
Engine Oil Pressure	610	kPa	607	613	3516E Genset - ECM 1 Master ECM (ZNL00276)
Fuel Pressure	740	kPa	738	740	3516E Genset - ECM 1 Master ECM (ZNL00276)
Barometric Pressure	100,0	kPa	100,0	100,0	3516E Genset - ECM 1 Master ECM (ZNL00276)
Crankcase Pressure	0,0	kPa	0,0	0,1	3516E Genset - ECM 1 Master ECM (ZNL00276)
Fuel Consumption Rate	209,8	L/h	209,4	212,2	3516E Genset - ECM 1 Master ECM (ZNL00276)
Engine Load Factor	24	%	24	25	3516E Genset - ECM 1 Master ECM (ZNL00276)
Engine Power Derate	0	%	0	0	3516E Genset - ECM 1 Master ECM (ZNL00276)
Battery Voltage	26,5	Volts	26,0	26,5	3516E Genset - ECM 1 Master ECM (ZNL00276)
Engine Oil Filter Differential Pressure	31,0	kPa	30,5	31,5	EMCP 4.4 (CAT00000)
Air Filter #1 Restriction	0,4	kPa	0,3	0,4	3516E Genset - ECM 1 Master ECM (ZNL00276)

Air Filter #2 Restriction	0,5	kPa	0,4	0,5	3516E Genset - ECM 1 Master ECM (ZNL00276)

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Comments

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Product Link Elite (ZNL00276)

Parameter	Value
Product ID	ZNL00276
Machine Serial Number	
Equipment ID	ZNL00276
ECM Part Number	4590786-04
ECM Serial Number	2081F261TR
Software Group Part Number	5754275-00
Software Group Release Date	Mar2019
Software Group Description	VIMS_TELEMATICS_2019_03_06
Application Software Part Number	5672205-00
Cellular Device ECM Serial Number	NA
Cellular Device ECM Hardware Part Number	NA
Cellular Radio Module Software Part Number	NA
Satellite Device ECM Serial Number	NA
Satellite Device ECM Hardware Part Number	NA
Satellite Radio Module Software Part Number	NA
Wi-Fi Radio Hardware Serial Number	NA
Wi-Fi Radio Hardware Part Number	NA
Wi-Fi Radio Software Part Number	NA

3516E Genset - ECM 1 Master ECM (ZNL00276)

Parameter	Value
Equipment ID	
Engine Serial Number	ZNL00276
ECM Serial Number	28418176VW
Software Group Part Number	6081399-00
Software Group Release Date	FEB21
Software Group Description	EP-MEUIC_50Hz_PROD_10.2

3516E Genset - ECM 2 Slave ECM (ZNL00276)

Parameter	Value
Engine Serial Number	ZNL00276
ECM Serial Number	31416182VW

Software Group Part Number	6081399-00
Software Group Release Date	FEB21
Software Group Description	EP-MEUIC_50Hz_PROD_10.2

Digital Voltage Regulator

Parameter	Value
ECM Part Number	3147755-00
ECM Serial Number	22316013GD
Software Group Part Number	3184763-01
Software Group Release Date	NOV2007
Software Group Description	Regulator Software

Digital Pyrometer #1

Parameter	Value
ECM Part Number	3434631-04
ECM Serial Number	2951D024CL
Software Group Part Number	4559451-00
Software Group Release Date	MAR2014
Software Group Description	exhgaspyro

EMCP 4.4 (CAT00000)

Parameter	Value
ECM Part Number	5034417-00
ECM Serial Number	2631E020TV
Software Group Part Number	6053891-00
Software Group Release Date	NOV2020
Software Group Description	EMCP 4.4 English, v4.11H PROD, 11 November 2020

Description	Value	Unit	Min	Max	ECM
EMCP4.4					
Engine Speed	1501	rpm	1499	1501	EMCP 4.4 (CAT00000)
Generator AC Frequency	50,0	Hz	50,0	50,0	EMCP 4.4 (CAT00000)
Generator Phase A RMS Voltage	231	Volts	231	232	EMCP 4.4 (CAT00000)
Generator Phase B RMS Voltage	231	Volts	231	231	EMCP 4.4 (CAT00000)
Generator Phase C RMS Voltage	231	Volts	231	231	EMCP 4.4 (CAT00000)
Generator Phase AB Line-Line AC RMS Voltage	401	Volts	401	401	EMCP 4.4 (CAT00000)

Generator Phase BC Line-Line AC RMS Voltage	400	Volts	399	400	EMCP 4.4 (CAT00000)
Generator Phase CA Line-Line AC RMS Voltage	400	Volts	400	401	EMCP 4.4 (CAT00000)
Generator Phase A RMS Current	941	Amps	941	943	EMCP 4.4 (CAT00000)
Generator Phase B RMS Current	943	Amps	942	944	EMCP 4.4 (CAT00000)
Generator Phase C RMS Current	946	Amps	945	947	EMCP 4.4 (CAT00000)
Generator Total Real Power	653	kW	653	656	EMCP 4.4 (CAT00000)
Generator Overall Power Factor	1,00		1,00	1,00	EMCP 4.4 (CAT00000)
Generator Total Apparent Power	654	kVA	653	655	EMCP 4.4 (CAT00000)
Generator Total Reactive Power	12	kVAr	12	12	EMCP 4.4 (CAT00000)
Generator Excitation Field Current	1,40	Amps	1,25	1,45	Digital Voltage Regulator
Generator Excitation Field Voltage	23,90	Volts	8,00	25,45	Digital Voltage Regulator

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Comments

1300 KWe

Product Link Elite (ZNL00276)

Parameter	Value
Product ID	ZNL00276
Machine Serial Number	
Equipment ID	ZNL00276
ECM Part Number	4590786-04
ECM Serial Number	2081F261TR
Software Group Part Number	5754275-00
Software Group Release Date	Mar2019
Software Group Description	VIMS_TELEMATICS_2019_03_06
Application Software Part Number	5672205-00
Cellular Device ECM Serial Number	NA
Cellular Device ECM Hardware Part Number	NA
Cellular Radio Module Software Part Number	NA
Satellite Device ECM Serial Number	NA
Satellite Device ECM Hardware Part Number	NA
Satellite Radio Module Software Part Number	NA
Wi-Fi Radio Hardware Serial Number	NA
Wi-Fi Radio Hardware Part Number	NA
Wi-Fi Radio Software Part Number	NA

3516E Genset - ECM 1 Master ECM (ZNL00276)

Parameter	Value
Equipment ID	
Engine Serial Number	ZNL00276
ECM Serial Number	28418176VW
Software Group Part Number	6081399-00
Software Group Release Date	FEB21
Software Group Description	EP-MEUIC_50Hz_PROD_10.2

3516E Genset - ECM 2 Slave ECM (ZNL00276)

Parameter	Value
Engine Serial Number	ZNL00276
ECM Serial Number	31416182VW

Software Group Part Number	6081399-00
Software Group Release Date	FEB21
Software Group Description	EP-MEUIC_50Hz_PROD_10.2

Digital Voltage Regulator

Parameter	Value
ECM Part Number	3147755-00
ECM Serial Number	22316013GD
Software Group Part Number	3184763-01
Software Group Release Date	NOV2007
Software Group Description	Regulator Software

Digital Pyrometer #1

Parameter	Value
ECM Part Number	3434631-04
ECM Serial Number	2951D024CL
Software Group Part Number	4559451-00
Software Group Release Date	MAR2014
Software Group Description	exhgaspyro

EMCP 4.4 (CAT00000)

Parameter	Value
ECM Part Number	5034417-00
ECM Serial Number	2631E020TV
Software Group Part Number	6053891-00
Software Group Release Date	NOV2020
Software Group Description	EMCP 4.4 English, v4.11H PROD, 11 November 2020

Description	Value	Unit	Min	Max	ECM
TEMP & PRESSION					
Engine Speed	1500	rpm	1499	1501	3516E Genset - ECM 1 Master ECM (ZNL00276)
Engine Coolant Temperature	50,0	Deg C	84	84	3516E Genset - ECM 1 Master ECM (ZNL00276)
Air Inlet Temperature	25,5	Deg C	25,5	25,5	3516E Genset - ECM 1 Master ECM (ZNL00276)
Intake Manifold Air Temperature	40,9	Deg C	40,9	41,0	3516E Genset - ECM 1 Master ECM (ZNL00276)
Fuel Temperature	28	Deg C	28	28	3516E Genset - ECM 1 Master ECM (ZNL00276)

Engine Oil Temperature	90	Deg C	90	90	3516E Genset - ECM 1 Master ECM (ZNL00276)
Engine Turbocharger #1 Turbine Intake Temperature	717,0	Deg C	717,0	718,8	3516E Genset - ECM 1 Master ECM (ZNL00276)
Engine Turbocharger #2 Turbine Intake Temperature	704,0	Deg C	703,9	705,6	3516E Genset - ECM 1 Master ECM (ZNL00276)
Boost Pressure	114	kPa	114	117	3516E Genset - ECM 1 Master ECM (ZNL00276)
Engine Oil Pressure	593	kPa	592	594	3516E Genset - ECM 1 Master ECM (ZNL00276)
Fuel Pressure	706	kPa	704	708	3516E Genset - ECM 1 Master ECM (ZNL00276)
Barometric Pressure	100,0	kPa	100,0	100,0	3516E Genset - ECM 1 Master ECM (ZNL00276)
Crankcase Pressure	0,1	kPa	0,1	0,2	3516E Genset - ECM 1 Master ECM (ZNL00276)
Fuel Consumption Rate	342,4	L/h	340,9	344,9	3516E Genset - ECM 1 Master ECM (ZNL00276)
Engine Load Factor	48	%	48	49	3516E Genset - ECM 1 Master ECM (ZNL00276)
Engine Power Derate	0	%	0	0	3516E Genset - ECM 1 Master ECM (ZNL00276)
Battery Voltage	26,5	Volts	26,0	26,5	3516E Genset - ECM 1 Master ECM (ZNL00276)
Engine Oil Filter Differential Pressure	32,5	kPa	32,0	32,5	EMCP 4.4 (CAT00000)
Air Filter #1 Restriction	0,9	kPa	0,9	1,0	3516E Genset - ECM 1 Master ECM (ZNL00276)

Air Filter #2 Restriction	1,2	kPa	1,0	1,2	3516E Genset - ECM 1 Master ECM (ZNL00276)

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Comments

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Product Link Elite (ZNL00276)

Parameter	Value
Product ID	ZNL00276
Machine Serial Number	
Equipment ID	ZNL00276
ECM Part Number	4590786-04
ECM Serial Number	2081F261TR
Software Group Part Number	5754275-00
Software Group Release Date	Mar2019
Software Group Description	VIMS_TELEMATICS_2019_03_06
Application Software Part Number	5672205-00
Cellular Device ECM Serial Number	NA
Cellular Device ECM Hardware Part Number	NA
Cellular Radio Module Software Part Number	NA
Satellite Device ECM Serial Number	NA
Satellite Device ECM Hardware Part Number	NA
Satellite Radio Module Software Part Number	NA
Wi-Fi Radio Hardware Serial Number	NA
Wi-Fi Radio Hardware Part Number	NA
Wi-Fi Radio Software Part Number	NA

3516E Genset - ECM 1 Master ECM (ZNL00276)

Parameter	Value
Equipment ID	
Engine Serial Number	ZNL00276
ECM Serial Number	28418176VW
Software Group Part Number	6081399-00
Software Group Release Date	FEB21
Software Group Description	EP-MEUIC_50Hz_PROD_10.2

3516E Genset - ECM 2 Slave ECM (ZNL00276)

Parameter	Value
Engine Serial Number	ZNL00276
ECM Serial Number	31416182VW

Software Group Part Number	6081399-00
Software Group Release Date	FEB21
Software Group Description	EP-MEUIC_50Hz_PROD_10.2

Digital Voltage Regulator

Parameter	Value
ECM Part Number	3147755-00
ECM Serial Number	22316013GD
Software Group Part Number	3184763-01
Software Group Release Date	NOV2007
Software Group Description	Regulator Software

Digital Pyrometer #1

Parameter	Value
ECM Part Number	3434631-04
ECM Serial Number	2951D024CL
Software Group Part Number	4559451-00
Software Group Release Date	MAR2014
Software Group Description	exhgaspyro

EMCP 4.4 (CAT00000)

Parameter	Value
ECM Part Number	5034417-00
ECM Serial Number	2631E020TV
Software Group Part Number	6053891-00
Software Group Release Date	NOV2020
Software Group Description	EMCP 4.4 English, v4.11H PROD, 11 November 2020

Description	Value	Unit	Min	Max	ECM
EMCP4.4					
Engine Speed	1500	rpm	1499	1501	EMCP 4.4 (CAT00000)
Generator AC Frequency	50,0	Hz	50,0	50,0	EMCP 4.4 (CAT00000)
Generator Phase A RMS Voltage	231	Volts	231	232	EMCP 4.4 (CAT00000)
Generator Phase B RMS Voltage	231	Volts	231	231	EMCP 4.4 (CAT00000)
Generator Phase C RMS Voltage	231	Volts	231	231	EMCP 4.4 (CAT00000)
Generator Phase AB Line-Line AC RMS Voltage	401	Volts	401	401	EMCP 4.4 (CAT00000)

Generator Phase BC Line-Line AC RMS Voltage	399	Volts	399	400	EMCP 4.4 (CAT00000)
Generator Phase CA Line-Line AC RMS Voltage	400	Volts	400	401	EMCP 4.4 (CAT00000)
Generator Phase A RMS Current	1877	Amps	1876	1879	EMCP 4.4 (CAT00000)
Generator Phase B RMS Current	1890	Amps	1887	1891	EMCP 4.4 (CAT00000)
Generator Phase C RMS Current	1896	Amps	1895	1898	EMCP 4.4 (CAT00000)
Generator Total Real Power	1307	kW	1306	1310	EMCP 4.4 (CAT00000)
Generator Overall Power Factor	1,00		1,00	1,00	EMCP 4.4 (CAT00000)
Generator Total Apparent Power	1308	kVA	1307	1310	EMCP 4.4 (CAT00000)
Generator Total Reactive Power	33	kVAr	32	33	EMCP 4.4 (CAT00000)
Generator Excitation Field Current	1,65	Amps	1,55	1,70	Digital Voltage Regulator
Generator Excitation Field Voltage	21,00	Volts	11,75	24,75	Digital Voltage Regulator

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Status

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Comments

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Product Link Elite (ZNL00276)

Parameter	Value
Product ID	ZNL00276
Machine Serial Number	
Equipment ID	ZNL00276
ECM Part Number	4590786-04
ECM Serial Number	2081F261TR
Software Group Part Number	5754275-00
Software Group Release Date	Mar2019
Software Group Description	VIMS_TELEMATICS_2019_03_06
Application Software Part Number	5672205-00
Cellular Device ECM Serial Number	NA
Cellular Device ECM Hardware Part Number	NA
Cellular Radio Module Software Part Number	NA
Satellite Device ECM Serial Number	NA
Satellite Device ECM Hardware Part Number	NA
Satellite Radio Module Software Part Number	NA
Wi-Fi Radio Hardware Serial Number	NA
Wi-Fi Radio Hardware Part Number	NA
Wi-Fi Radio Software Part Number	NA

3516E Genset - ECM 1 Master ECM (ZNL00276)

Parameter	Value
Equipment ID	
Engine Serial Number	ZNL00276
ECM Serial Number	28418176VW
Software Group Part Number	6081399-00
Software Group Release Date	FEB21
Software Group Description	EP-MEUIC_50Hz_PROD_10.2

3516E Genset - ECM 2 Slave ECM (ZNL00276)

Parameter	Value
Engine Serial Number	ZNL00276
ECM Serial Number	31416182VW

Software Group Part Number	6081399-00
Software Group Release Date	FEB21
Software Group Description	EP-MEUIC_50Hz_PROD_10.2

Digital Voltage Regulator

Parameter	Value
ECM Part Number	3147755-00
ECM Serial Number	22316013GD
Software Group Part Number	3184763-01
Software Group Release Date	NOV2007
Software Group Description	Regulator Software

Digital Pyrometer #1

Parameter	Value
ECM Part Number	3434631-04
ECM Serial Number	2951D024CL
Software Group Part Number	4559451-00
Software Group Release Date	MAR2014
Software Group Description	exhgaspyro

EMCP 4.4 (CAT00000)

Parameter	Value
ECM Part Number	5034417-00
ECM Serial Number	2631E020TV
Software Group Part Number	6053891-00
Software Group Release Date	NOV2020
Software Group Description	EMCP 4.4 English, v4.11H PROD, 11 November 2020

Description	Value	Unit	Min	Max	ECM
TEMP & PRESSION					
Engine Speed	1499	rpm	1499	1501	3516E Genset - ECM 1 Master ECM (ZNL00276)
Engine Coolant Temperature	87	Deg C	87	87	3516E Genset - ECM 1 Master ECM (ZNL00276)
Air Inlet Temperature	27,5	Deg C	27,4	27,6	3516E Genset - ECM 1 Master ECM (ZNL00276)
Intake Manifold Air Temperature	45,0	Deg C	45,0	45,3	3516E Genset - ECM 1 Master ECM (ZNL00276)
Fuel Temperature	29	Deg C	29	29	3516E Genset - ECM 1 Master ECM (ZNL00276)

Engine Oil Temperature	94	Deg C	94	94	3516E Genset - ECM 1 Master ECM (ZNL00276)
Engine Turbocharger #1 Turbine Intake Temperature	666,0	Deg C	665,5	667,3	3516E Genset - ECM 1 Master ECM (ZNL00276)
Engine Turbocharger #2 Turbine Intake Temperature	658,7	Deg C	658,0	659,3	3516E Genset - ECM 1 Master ECM (ZNL00276)
Boost Pressure	261	kPa	260	264	3516E Genset - ECM 1 Master ECM (ZNL00276)
Engine Oil Pressure	566	kPa	565	567	3516E Genset - ECM 1 Master ECM (ZNL00276)
Fuel Pressure	683	kPa	682	685	3516E Genset - ECM 1 Master ECM (ZNL00276)
Barometric Pressure	100,0	kPa	100,0	100,0	3516E Genset - ECM 1 Master ECM (ZNL00276)
Crankcase Pressure	0,3	kPa	0,3	0,4	3516E Genset - ECM 1 Master ECM (ZNL00276)
Fuel Consumption Rate	555,8	L/h	551,3	560,4	3516E Genset - ECM 1 Master ECM (ZNL00276)
Engine Load Factor	71	%	70	72	3516E Genset - ECM 1 Master ECM (ZNL00276)
Engine Power Derate	0	%	0	0	3516E Genset - ECM 1 Master ECM (ZNL00276)
Battery Voltage	26,0	Volts	26,0	26,0	3516E Genset - ECM 1 Master ECM (ZNL00276)
Engine Oil Filter Differential Pressure	33,5	kPa	33,5	34,0	EMCP 4.4 (CAT00000)
Air Filter #1 Restriction	2,5	kPa	2,4	2,6	3516E Genset - ECM 1 Master ECM (ZNL00276)

Air Filter #2 Restriction	2,7	kPa	2,7	2,8	3516E Genset - ECM 1 Master ECM (ZNL00276)

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Comments

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Product Link Elite (ZNL00276)

Parameter	Value
Product ID	ZNL00276
Machine Serial Number	
Equipment ID	ZNL00276
ECM Part Number	4590786-04
ECM Serial Number	2081F261TR
Software Group Part Number	5754275-00
Software Group Release Date	Mar2019
Software Group Description	VIMS_TELEMATICS_2019_03_06
Application Software Part Number	5672205-00
Cellular Device ECM Serial Number	NA
Cellular Device ECM Hardware Part Number	NA
Cellular Radio Module Software Part Number	NA
Satellite Device ECM Serial Number	NA
Satellite Device ECM Hardware Part Number	NA
Satellite Radio Module Software Part Number	NA
Wi-Fi Radio Hardware Serial Number	NA
Wi-Fi Radio Hardware Part Number	NA
Wi-Fi Radio Software Part Number	NA

3516E Genset - ECM 1 Master ECM (ZNL00276)

Parameter	Value
Equipment ID	
Engine Serial Number	ZNL00276
ECM Serial Number	28418176VW
Software Group Part Number	6081399-00
Software Group Release Date	FEB21
Software Group Description	EP-MEUIC_50Hz_PROD_10.2

3516E Genset - ECM 2 Slave ECM (ZNL00276)

Parameter	Value
Engine Serial Number	ZNL00276
ECM Serial Number	31416182VW

Software Group Part Number	6081399-00
Software Group Release Date	FEB21
Software Group Description	EP-MEUIC_50Hz_PROD_10.2

Digital Voltage Regulator

Parameter	Value
ECM Part Number	3147755-00
ECM Serial Number	22316013GD
Software Group Part Number	3184763-01
Software Group Release Date	NOV2007
Software Group Description	Regulator Software

Digital Pyrometer #1

Parameter	Value
ECM Part Number	3434631-04
ECM Serial Number	2951D024CL
Software Group Part Number	4559451-00
Software Group Release Date	MAR2014
Software Group Description	exhgaspyro

EMCP 4.4 (CAT00000)

Parameter	Value
ECM Part Number	5034417-00
ECM Serial Number	2631E020TV
Software Group Part Number	6053891-00
Software Group Release Date	NOV2020
Software Group Description	EMCP 4.4 English, v4.11H PROD, 11 November 2020

Description	Value	Unit	Min	Max	ECM
EMCP4.4					
Engine Speed	1500	rpm	1424	1508	EMCP 4.4 (CAT00000)
Generator AC Frequency	50,0	Hz	48,1	50,3	EMCP 4.4 (CAT00000)
Generator Phase A RMS Voltage	232	Volts	211	232	EMCP 4.4 (CAT00000)
Generator Phase B RMS Voltage	231	Volts	213	233	EMCP 4.4 (CAT00000)
Generator Phase C RMS Voltage	231	Volts	214	233	EMCP 4.4 (CAT00000)
Generator Phase AB Line-Line AC RMS Voltage	401	Volts	364	401	EMCP 4.4 (CAT00000)

Generator Phase BC Line-Line AC RMS Voltage	399	Volts	369	404	EMCP 4.4 (CAT00000)
Generator Phase CA Line-Line AC RMS Voltage	400	Volts	372	403	EMCP 4.4 (CAT00000)
Generator Phase A RMS Current	2805	Amps	1875	2884	EMCP 4.4 (CAT00000)
Generator Phase B RMS Current	2824	Amps	1887	2910	EMCP 4.4 (CAT00000)
Generator Phase C RMS Current	2836	Amps	1895	2919	EMCP 4.4 (CAT00000)
Generator Total Real Power	1954	kW	993	2019	EMCP 4.4 (CAT00000)
Generator Overall Power Factor	1,00		1,00	1,00	EMCP 4.4 (CAT00000)
Generator Total Apparent Power	1956	kVA	1177	2014	EMCP 4.4 (CAT00000)
Generator Total Reactive Power	61	kVAr	32	183	EMCP 4.4 (CAT00000)
Generator Excitation Field Current	2,00	Amps	0,20	2,20	Digital Voltage Regulator
Generator Excitation Field Voltage	19,70	Volts	-0,50	37,95	Digital Voltage Regulator

Cat Electronic Technician 2022A v1.0

Status

01/09/2022 12:03

Comments

2600 KWe COSf 0,9

Product Link Elite (ZNL00276)

Parameter	Value
Product ID	ZNL00276
Machine Serial Number	
Equipment ID	ZNL00276
ECM Part Number	4590786-04
ECM Serial Number	2081F261TR
Software Group Part Number	5754275-00
Software Group Release Date	Mar2019
Software Group Description	VIMS_TELEMATICS_2019_03_06
Application Software Part Number	5672205-00
Cellular Device ECM Serial Number	NA
Cellular Device ECM Hardware Part Number	NA
Cellular Radio Module Software Part Number	NA
Satellite Device ECM Serial Number	NA
Satellite Device ECM Hardware Part Number	NA
Satellite Radio Module Software Part Number	NA
Wi-Fi Radio Hardware Serial Number	NA
Wi-Fi Radio Hardware Part Number	NA
Wi-Fi Radio Software Part Number	NA

3516E Genset - ECM 1 Master ECM (ZNL00276)

Parameter	Value
Equipment ID	
Engine Serial Number	ZNL00276
ECM Serial Number	28418176VW
Software Group Part Number	6081399-00
Software Group Release Date	FEB21
Software Group Description	EP-MEUIC_50Hz_PROD_10.2

3516E Genset - ECM 2 Slave ECM (ZNL00276)

Parameter	Value
Engine Serial Number	ZNL00276
ECM Serial Number	31416182VW

Software Group Part Number	6081399-00
Software Group Release Date	FEB21
Software Group Description	EP-MEUIC_50Hz_PROD_10.2

Digital Voltage Regulator

Parameter	Value
ECM Part Number	3147755-00
ECM Serial Number	22316013GD
Software Group Part Number	3184763-01
Software Group Release Date	NOV2007
Software Group Description	Regulator Software

Digital Pyrometer #1

Parameter	Value
ECM Part Number	3434631-04
ECM Serial Number	2951D024CL
Software Group Part Number	4559451-00
Software Group Release Date	MAR2014
Software Group Description	exhgaspyro

EMCP 4.4 (CAT00000)

Parameter	Value
ECM Part Number	5034417-00
ECM Serial Number	2631E020TV
Software Group Part Number	6053891-00
Software Group Release Date	NOV2020
Software Group Description	EMCP 4.4 English, v4.11H PROD, 11 November 2020

Description	Value	Unit	Min	Max	ECM
TEMP & PRESSION					
Engine Speed	1500	rpm	1498	1502	3516E Genset - ECM 1 Master ECM (ZNL00276)
Engine Coolant Temperature	100	Deg C	100	100	3516E Genset - ECM 1 Master ECM (ZNL00276)
Air Inlet Temperature	33,0	Deg C	33,0	33,2	3516E Genset - ECM 1 Master ECM (ZNL00276)
Intake Manifold Air Temperature	54,1	Deg C	53,9	54,3	3516E Genset - ECM 1 Master ECM (ZNL00276)
Fuel Temperature	36	Deg C	36	36	3516E Genset - ECM 1 Master ECM (ZNL00276)

Engine Oil Temperature	107	Deg C	107	107	3516E Genset - ECM 1 Master ECM (ZNL00276)
Engine Turbocharger #1 Turbine Intake Temperature	701,2	Deg C	701,2	702,9	3516E Genset - ECM 1 Master ECM (ZNL00276)
Engine Turbocharger #2 Turbine Intake Temperature	688,2	Deg C	688,1	690,8	3516E Genset - ECM 1 Master ECM (ZNL00276)
Boost Pressure	339	kPa	337	342	3516E Genset - ECM 1 Master ECM (ZNL00276)
Engine Oil Pressure	524	kPa	523	525	3516E Genset - ECM 1 Master ECM (ZNL00276)
Fuel Pressure	650	kPa	644	651	3516E Genset - ECM 1 Master ECM (ZNL00276)
Barometric Pressure	100,0	kPa	100,0	100,0	3516E Genset - ECM 1 Master ECM (ZNL00276)
Crankcase Pressure	0,4	kPa	0,3	0,4	3516E Genset - ECM 1 Master ECM (ZNL00276)
Fuel Consumption Rate	704,4	L/h	698,4	709,5	3516E Genset - ECM 1 Master ECM (ZNL00276)
Engine Load Factor	92	%	91	92	3516E Genset - ECM 1 Master ECM (ZNL00276)
Engine Power Derate	0	%	0	0	3516E Genset - ECM 1 Master ECM (ZNL00276)
Battery Voltage	26,0	Volts	26,0	26,5	3516E Genset - ECM 1 Master ECM (ZNL00276)
Engine Oil Filter Differential Pressure	35,0	kPa	34,5	35,5	EMCP 4.4 (CAT00000)
Air Filter #1 Restriction	3,4	kPa	3,3	3,4	3516E Genset - ECM 1 Master ECM (ZNL00276)

Air Filter #2 Restriction	3,7	kPa	3,5	3,7	3516E Genset - ECM 1 Master ECM (ZNL00276)

Cat Electronic Technician 2022A v1.0

Status

01/09/2022 12:02

Comments

2600 KWe COSf 0,9

Product Link Elite (ZNL00276)

Parameter	Value
Product ID	ZNL00276
Machine Serial Number	
Equipment ID	ZNL00276
ECM Part Number	4590786-04
ECM Serial Number	2081F261TR
Software Group Part Number	5754275-00
Software Group Release Date	Mar2019
Software Group Description	VIMS_TELEMATICS_2019_03_06
Application Software Part Number	5672205-00
Cellular Device ECM Serial Number	NA
Cellular Device ECM Hardware Part Number	NA
Cellular Radio Module Software Part Number	NA
Satellite Device ECM Serial Number	NA
Satellite Device ECM Hardware Part Number	NA
Satellite Radio Module Software Part Number	NA
Wi-Fi Radio Hardware Serial Number	NA
Wi-Fi Radio Hardware Part Number	NA
Wi-Fi Radio Software Part Number	NA

3516E Genset - ECM 1 Master ECM (ZNL00276)

Parameter	Value
Equipment ID	
Engine Serial Number	ZNL00276
ECM Serial Number	28418176VW
Software Group Part Number	6081399-00
Software Group Release Date	FEB21
Software Group Description	EP-MEUIC_50Hz_PROD_10.2

3516E Genset - ECM 2 Slave ECM (ZNL00276)

Parameter	Value
Engine Serial Number	ZNL00276
ECM Serial Number	31416182VW

Software Group Part Number	6081399-00
Software Group Release Date	FEB21
Software Group Description	EP-MEUIC_50Hz_PROD_10.2

Digital Voltage Regulator

Parameter	Value
ECM Part Number	3147755-00
ECM Serial Number	22316013GD
Software Group Part Number	3184763-01
Software Group Release Date	NOV2007
Software Group Description	Regulator Software

Digital Pyrometer #1

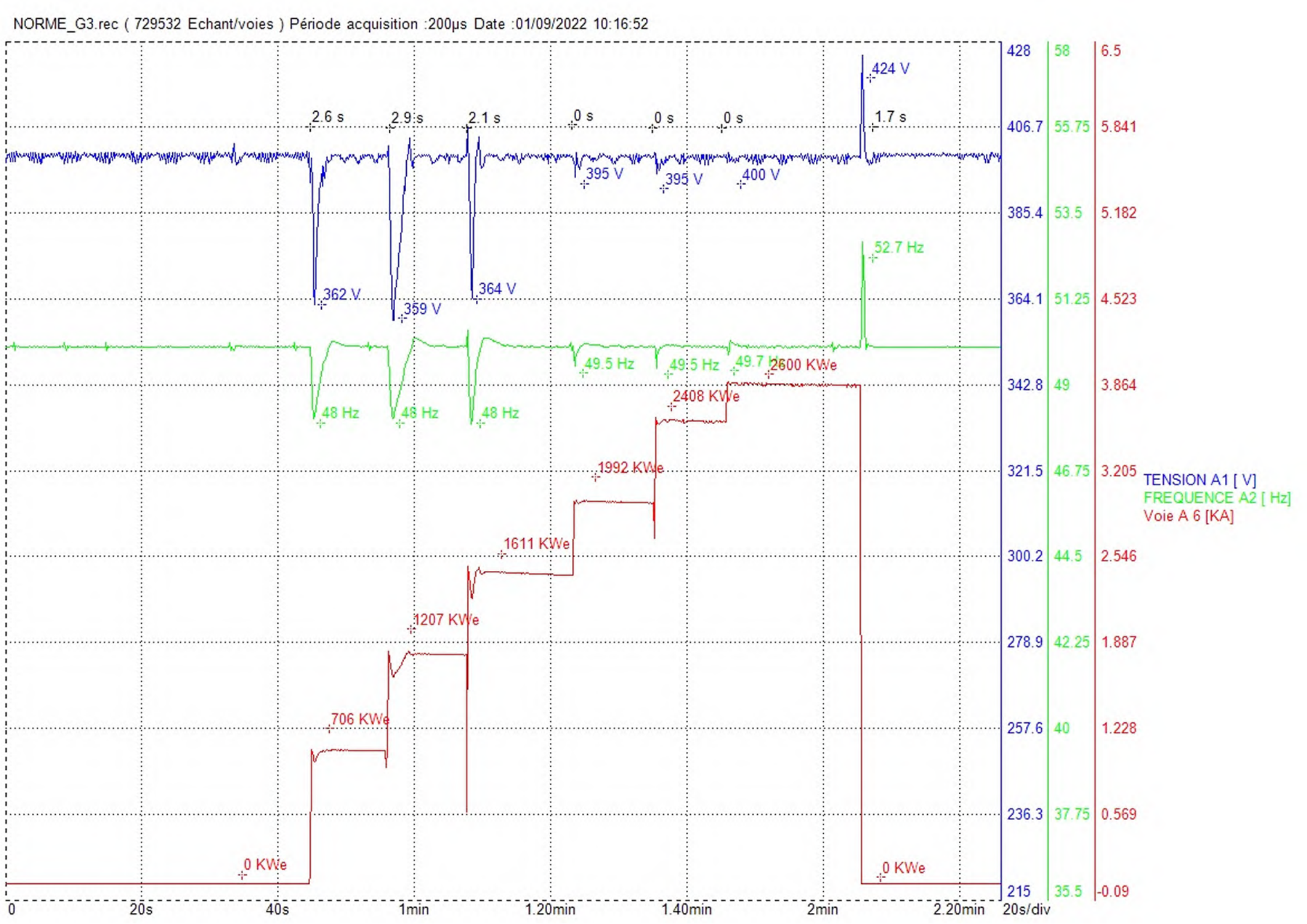
Parameter	Value
ECM Part Number	3434631-04
ECM Serial Number	2951D024CL
Software Group Part Number	4559451-00
Software Group Release Date	MAR2014
Software Group Description	exhgaspyro

EMCP 4.4 (CAT00000)

Parameter	Value
ECM Part Number	5034417-00
ECM Serial Number	2631E020TV
Software Group Part Number	6053891-00
Software Group Release Date	NOV2020
Software Group Description	EMCP 4.4 English, v4.11H PROD, 11 November 2020

Description	Value	Unit	Min	Max	ECM
EMCP4.4					
Engine Speed	1501	rpm	1498	1502	EMCP 4.4 (CAT00000)
Generator AC Frequency	50,0	Hz	50,0	50,1	EMCP 4.4 (CAT00000)
Generator Phase A RMS Voltage	232	Volts	231	232	EMCP 4.4 (CAT00000)
Generator Phase B RMS Voltage	231	Volts	230	231	EMCP 4.4 (CAT00000)
Generator Phase C RMS Voltage	231	Volts	230	231	EMCP 4.4 (CAT00000)
Generator Phase AB Line-Line AC RMS Voltage	401	Volts	400	401	EMCP 4.4 (CAT00000)

Generator Phase BC Line-Line AC RMS Voltage	399	Volts	398	400	EMCP 4.4 (CAT00000)
Generator Phase CA Line-Line AC RMS Voltage	401	Volts	400	401	EMCP 4.4 (CAT00000)
Generator Phase A RMS Current	4165	Amps	4159	4172	EMCP 4.4 (CAT00000)
Generator Phase B RMS Current	4176	Amps	4171	4185	EMCP 4.4 (CAT00000)
Generator Phase C RMS Current	4242	Amps	4234	4247	EMCP 4.4 (CAT00000)
Generator Total Real Power	2608	kW	2601	2618	EMCP 4.4 (CAT00000)
Generator Overall Power Factor	0,90		0,90	0,90	EMCP 4.4 (CAT00000)
Generator Total Apparent Power	2907	kVA	2902	2915	EMCP 4.4 (CAT00000)
Generator Total Reactive Power	-1281	kVAr	-1285	-1278	EMCP 4.4 (CAT00000)
Generator Excitation Field Current	1,85	Amps	1,75	2,00	Digital Voltage Regulator
Generator Excitation Field Voltage	20,25	Volts	10,80	35,90	Digital Voltage Regulator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2.6 s
2.9 s
2.1 s
0 s
0 s
0 s
1.7 s
424 V
395 V
395 V
400 V
362 V
359 V
364 V
52.7 Hz
49.5 Hz
49.5 Hz
49.7 Hz
48 Hz
48 Hz
48 Hz
0 KWe
706 KWe
1207 KWe
1611 KWe
1992 KWe
2408 KWe
2600 KWe
0 KWe
428
406.7
385.4
364.1
342.8
321.5
300.2
278.9
257.6
236.3
215
58
55.75
53.5
51.25
49
46.75
44.5
42.25
40
37.75
35.5
6.5
5.841
5.182
4.523
3.864
3.205
2.546
1.887
1.228
0.569
-0.09
TENSION A1 [V]
FREQUENCE A2 [Hz]
Voie A 6 [KA]
0
20s
40s
1min
1.20min
1.40min
2min
2.20min
20s/div

Proprietà

DATA 4 ITALY

Progetto

DC 07
MILAN

Supervisore delegato del committente

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Opere edili e prefabbricati

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Impianti meccanici

OMEGA CONCEPT IMPIANTI E SISTEMI S.p.a.
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impianti elettrici/dati

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Progettazione antincendio

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Supervisione

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Via Pontaccio,12/A- 20121 Milano
italsocotec@italsocotec.it
Tél. : +39 02 89051500
Fax : +39 02 89051501

Cod	Data	Descrizione
	13/10/2022	

DATA 4 ITALY - DC07 Milan
Commissioning Level 1 - Grey tag
FAT GEC

PARAMETERS

IDENTIFICATION	
Customer	DATA4
Project	DC07 MILAN GEC
Date	12/09/2022
Eneria Department	BU DATA CENTER
Genset type	3516EHD
Genset S/N	CAT3516EAZNL00294
Power	3250kVA / 2600 kW
Rating	STANDBY
Eneria OT number	380304

ENGINE	MANUFACTURER :	
Type :	Theoretical Plate	Final Plate
Serial Number	ZNL00294	
AR Number	5930146	
Altitude max	2953 m	
Rack travel	FLS(8)/FTS(0)	
Power : HP / KW	3032kW	
No-load Speed	1515	
On-load Speed	1500	
Setting	N/A	

ENGINE REGULATION	
Manufacturer	CAT ADEM5E4
Model	ELECTRONIQUE/EUI
Actuator Number	ECM
Serial Number	28418275VW
Regulator Number	N/A
Serial Number	N/A
Spring Number	N/A

TURBOCHARGER	
Aftercooler	CAT
Number of turbos	4
Turbos manufacturer	CAT
Serial Number	555-0590 X4

INJECTION	PUMP INJECTOR
Injector Number	5816969

ENGINE CONTROL PANEL
EMCP4.4
GENERATOR
VOLTAGE / CURRENT/ FREQUENCY
KW / KVA / KVAr / P.f.
TOTAL KW% / KVA% / KVAr%
KWh / KVArh
EXCITATION FIELD VOLTAGE / CURRENT
ENGINE :
OIL PRESSURE / COOLANT TEMPERATURE
ENGINE SPEED / BATTERY VOLTAGE
TOTAL LAUNCH / TOTAL START
TEMPERATURE ECHAPPEMENT G-D
FUEL PRESSURE / OIL PRESSURE
BOOST PRESSURE / OIL TEMPERATURE
OIL, FUEL, AIR FILTER CLOGGING
FUEL CONSUMPTION RATE

RADIATOR	
Manufacturer	CAT
Part Number	575-1571
Reference	N/A
Serial Number	25213468
Power	N/A
Pulley Wheel Ratio	N/A
Belt Number	N/A

AIR-COOLER	
Manufacturer	N/A
Fan	N/A
Blades diameter	N/A
Power	N/A
Electrical Motor	N/A

AIR COOLER TEST BANCH

STARTING					
Main starter	Manufac.	CAT X2 349-6606	Type	24V/CW
Secondary starter	Manufac.	CAT X1 349-6606	Type	24V/CW
Alternator	Manufac.	CAT X1 591-2986	Volts/Amps	24V/50A

WATER HEATER			Pump		Thermostat	
Manufacturer	ENERIA					
Power	9kW	Manufac.	WILO	Manufacturer	DANFOSS
Voltage	400V	Voltage	230V	Setting	60°C

DRAWINGS	
Engine CAT N°	491-3960
Genset CAT N°	552-6069
Genset Eneria N°	E-7021-1
Genset Eneria N°	N/A
Switchgear Eneria N	N/A
Other Eneria N°	N/A

LIQUIDS	
Fuel LHV	10150KG cal/Kg
Fuel Density	0.88 Kg/L
Coolant	TEST BENCH
Lube oil	ORIGIN

GENERATOR	MANUFACTURER :	CATERPILLAR
Type :	Theoretical Plate	Final Plate
Serial Number	4Y702042	
AR Number	585-1976	
Frame Number	N/A	
Power kVA / kW	3250/2600	
Duty cycle	STANDBY	
Frequency	50HZ	
Temperature Max	150	
Efficiency	N/A	
Regulator type	CDVR	
Reference	314-7755	
Serial Number	28116001GD	
Excitation type	PERMANENT MAGNETS	

PARAMETERS

IDENTIFICATION	
Customer	DATA4
Project	DC07 MILAN GEC
Date	12 septembre 2022

TEST	
Test Date	13/09/2022
Test Supervisor	B004386

DISPLAY	Gauge
Voltmeter	0-400V
Frequencymeter	0-99HZ
Ammeter	0-5000A
Current transfo.	5000/5A
Wattmeter	0-2000 KW
Current transfo.	5000/5A
Water Temp.	CAT
Lube Oil Pressure	CAT
Lube Oil Temp.	CAT
Speed	CAT
Battery Voltage	CAT
Charge Air Pressure	CAT
Exhaust Temp.	N/A

EQUIPMENTS			
Control Panel	EMCP4.4	Battery charger	N/A
Cabinet	N/A	Ref / Serial N°	N/A
Transfer Switch	N/A	Earth Fault	N/A
Circuit Breaker	N/A	Ref	N/A
Coupler	N/A	Speed relay manuf.	EMCP4.4
Ref / Serial N°	N/A	Ref	503-4417-02
Load Sharing	N/A	Serial N°	3151E008TV
Ref / Serial N°	N/A	Starter Stop	400TR/MN
Power Return	EMCP4.4	Shut-off Valve	N/A
Ref	503-4417-02	Injection	CAT
Protection Board	EMCP4.4	Air	N/A
Ref	503-4417-02		
Serial N°	3151E008TV		

SETTINGS

DISPLAY	Théoretical Value	Tolerance	Checking
Voltage (V)	400	+/-5%	√
Frequency (Hz)	50	+/-2%	√
Current (I)	3609	+/-1%	√
Power (kVA)	2500	+/-1%	√
Water Temp. (°C)	89	+/-5%	√
LubeOil Pres. (kPa)	376	+/-5%	√
LubeOil Temp (°C)	N/A	+/-5%	/
Speed (tr/min)	1500	+/-5%	√
Battery Voltage (V)	27	+/-5%	√
Charge Air Pres. (kPa)	260	+/-5%	√
Exhaust Temp. (°C)	690	+/-5%	√

SECURITIES	Type	Level	Checking
Low Oil Pressure	SENSOR	205KPA	√
High Water Temp.	SENSOR	107°C	√
Low Oil Level	MURPHY	N/A	/
Low Coolant Level	N/A	N/A	/
High Oil Temp.	N/A	N/A	/
Overspeed	SENSOR	1770Tr/mn	√
Overcranck	CYCLES	5	√
Generator Temp.	N/A	N/A	/
Emergency Stop	PUSH BUTTON	NA	√
Over/Under Voltage	%	110/85	/
Over/Under Freq.	%	110/90	/
Overcurrent	%	105	/
Earth Protection	N/A	N/A	/
Power return	%	10	/
ALARMS			
Low Oil Pressure	SENSOR	239KPA	√
High Water Temp.	SENSOR	102°C	√
High Oil Temp.	N/A	N/A	/
Overspeed	%	105/90	/
Low Fuel Level	%	105/95	/
Low Water Temp.	SENSOR	21°C	√

COMMENTS	VISA / DATE

Eneria CAT
Moteurs et Groupes électrogènes

Witness Tests
QUAL FOR 10 / 03

IDENTIFICATION	
Customer	DATA4
Project	DC07 MILAN GEC
Genset S/N	CAT3516EAZNL00294

TEST	
Test Date	13 septembre 2022
Test Supervisor	B004386

LOAD PERFORMANCE TESTS

TIMER	
Before tests	1,1 Hrs
After tests	3,0 Hrs

TESTS PARAMETERS	
Atmospheric Pres.	747,8 mm Hg
Ambiant Temp.	31°C
Charge Air Temp	
Left Air Filter	30,4°C
Right Air Filter	29,7°C

FULL LOAD VALUES			
Oil Dif. Pressure	37 kPa	Actuator Voltage	
Fuel Dif. Pressure	N/A	No-load	N/A
Air Intake Temp.	46,9°C	Full load	N/A
Pressure Drop		Pick-up Voltage	N/A
Left Air Filter	3 kPa		
Right Air Filter	3,8 kPa		

VALUES

Duration (hours)	Power (kW)	Voltage (V)	Current (A)	Frequency (Hz)	Cos Ø	Excitation Voltage (V)	Charge Air Pressure (bars)		Exhaust Temp. (°C)		Oil Pressure (bars or kPa)	Water Temp (°C)	Fuel Pres. (bars or kPa)	Oil Temp. (°C)
							L	R	L	R				
15 mn	650 (25%)	400	943	50	1	17,25	N/A	30	344,3	344,1	639	82	733	88
15 mn	1300 (50%)	400	1886	50	1	18,2	N/A	114	434,1	429,9	624	83	699	90
15 mn	1950 (75%)	400	2834	50	1	30	N/A	262	408,2	390,7	606	84	671	92
60 mn	2600 (100%)	400	3798	50	1	36,45	N/A	337	396,4	375,7	580	91	637	99

COMMENTS	VISA / DATE

Eneria CAT
Moteurs et Groupes électrogènes

Procès Verbal
QUAL FOR 10 / 03

Fournisseur : *Supplier :*	N° du Procès Verbal : *Certificate Number :* 2022-09-002
Usine : *Works :*	Nombre de pages : *Number of sheets :* 35
Client : *Customer :* DATA4	**PROCES VERBAL DE RECETTE DE CONFORMITE AUX STIPULATIONS D'UNE COMMANDE ETABLI PAR L'INDUSTRIEL FOURNISSEUR** ***CERTIFICATE OF TESTS OF CONFORMITY TO THE STIPULATIONS OF AN ORDER ESTABLISHED BY THE INDUSTRIAL SUPPLIER***
N° de commande : *Order N° :* 380304	
Nom du projet : *Project name :* DC07 MILAN GEC	

Désignation *Designation*	Référence ou type *Reference or type*	Quantité *Quantity*	N° de série ou lot *Serial or batch N°*	N° de plan Drawing N°
Groupe électrogene	3516EHD	1	CAT3516EAZNL00294	491-3960 552-6069 E-7021-1

N° du Procès Verbal :
Certificate Number : 2022-09-002

Nous certifions que, sauf exceptions ou dérogations énumérées ci-après, la fourniture citée ci-dessus a été fabriquée conformément aux spécifications techniques du marché, commande ou sous-commande du client et que, toutes opérations de contrôle et d'essais effectuées, la fourniture répond, SOUS TOUS SES ASPECTS, à la commande, aux spécifications particulières ci-jointes, aux plans, ainsi qu'aux normes et règlements en vigueur s'y rapportant.

We certify that, subject to exceptions or concessions listed hereafter, the supplies detailed hereover were manufactured in accordance with the technical specifications of the contract, order or sub-order, and that all inspection operations and tests having been completed, the supplies comply IN EVERY RESPECT with the order, the relevant particular specifications, drawings and relevant standards and regulations in force.

☐ sans aucune réserve ou non-conformité
without any reservation or non-conformity

☐ avec les réserves ou non-conformités suivantes
with the following reservations or non-conformity

N° du Procès Verbal :	
Certificate Number :	2022-09-002

VISAS - SIGNATURES

CONTRÔLE FOURNISSEUR *SUPPLIER'S INSPECTION*	CONTRÔLE CLIENT *CUSTOMER'S INSPECTION*
Nom et fonction : A. MATIEA *Name and function :* Responsable Date : 13/01/22 Signature :	Nom et fonction : *Name and function :* Date : Signature :

Eneria
Service Commercial
Rue de Longpont - BP 10202
91311 MONTLHÉRY
Tél. 01 69 80 22 70 - Fax 01 69 80 21 90
Siret 352 774 079 00029 - APE 4669B

Cat Electronic Technician 2022A v1.0

Status

13/09/2022 13:35

3516E Genset - ECM 1 Master ECM (ZNL00294)

Parameter	Value
Equipment ID	
Engine Serial Number	ZNL00294
ECM Serial Number	28418275VW
Software Group Part Number	6081399-00
Software Group Release Date	FEB21
Software Group Description	EP-MEUIC_50Hz_PROD_10.2

Product Link Elite (ZNL00294)

Parameter	Value
Product ID	ZNL00294
Machine Serial Number	
Equipment ID	ZNL00294
ECM Part Number	4590786-05
ECM Serial Number	2661F525TR
Software Group Part Number	5754275-00
Software Group Release Date	Mar2019
Software Group Description	VIMS_TELEMATICS_2019_03_06
Application Software Part Number	5672205-00
Cellular Device ECM Serial Number	NA
Cellular Device ECM Hardware Part Number	NA
Cellular Radio Module Software Part Number	NA
Satellite Device ECM Serial Number	NA
Satellite Device ECM Hardware Part Number	NA
Satellite Radio Module Software Part Number	NA
Wi-Fi Radio Hardware Serial Number	NA
Wi-Fi Radio Hardware Part Number	NA
Wi-Fi Radio Software Part Number	NA

3516E Genset - ECM 2 Slave ECM (ZNL00294)

Parameter	Value
Engine Serial Number	ZNL00294
ECM Serial Number	31416064VW
Software Group Part Number	6081399-00
Software Group Release Date	FEB21
Software Group Description	EP-MEUIC_50Hz_PROD_10.2

Digital Voltage Regulator

Parameter	Value
ECM Part Number	3147755-00
ECM Serial Number	28116001GD
Software Group Part Number	3184763-01
Software Group Release Date	NOV2007
Software Group Description	Regulator Software

EMCP 4.4 (CAT00000)

Parameter	Value
ECM Part Number	5034417-00
ECM Serial Number	3151E008TV
Software Group Part Number	6053891-00
Software Group Release Date	NOV2020
Software Group Description	EMCP 4.4 English, v4.11H PROD, 11 November 2020

Digital Pyrometer #1

Parameter	Value
ECM Part Number	3434631-04
ECM Serial Number	2381D024CL
Software Group Part Number	4559451-00
Software Group Release Date	MAR2014
Software Group Description	exhgaspyro

Description	Value	Unit	Min	Max	ECM
EMCP4.4					
Engine Speed	1499	rpm	1496	1501	EMCP 4.4 (CAT00000)
Generator AC Frequency	50,0	Hz	50,0	50,0	EMCP 4.4 (CAT00000)
Generator Phase A RMS Voltage	231	Volts	231	232	EMCP 4.4 (CAT00000)
Generator Phase B RMS Voltage	231	Volts	231	231	EMCP 4.4 (CAT00000)
Generator Phase C RMS Voltage	231	Volts	231	231	EMCP 4.4 (CAT00000)
Generator Phase AB Line-Line AC RMS Voltage	401	Volts	401	401	EMCP 4.4 (CAT00000)
Generator Phase BC Line-Line AC RMS Voltage	400	Volts	399	400	EMCP 4.4 (CAT00000)

Generator Phase CA Line-Line AC RMS Voltage	400	Volts	400	401	EMCP 4.4 (CAT00000)
Generator Phase A RMS Current	943	Amps	942	944	EMCP 4.4 (CAT00000)
Generator Phase B RMS Current	942	Amps	942	943	EMCP 4.4 (CAT00000)
Generator Phase C RMS Current	945	Amps	944	946	EMCP 4.4 (CAT00000)
Generator Total Real Power	654	kW	653	655	EMCP 4.4 (CAT00000)
Generator Overall Power Factor	1,00		1,00	1,00	EMCP 4.4 (CAT00000)
Generator Total Apparent Power	654	kVA	654	655	EMCP 4.4 (CAT00000)
Generator Total Reactive Power	12	kVAr	12	12	EMCP 4.4 (CAT00000)
Generator Excitation Field Current	1,35	Amps	1,35	1,40	Digital Voltage Regulator
Generator Excitation Field Voltage	17,25	Volts	12,50	22,90	Digital Voltage Regulator

Hold button has been pressed.

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3516E Genset - ECM 1 Master ECM (ZNL00294)

Parameter	Value
Equipment ID	
Engine Serial Number	ZNL00294
ECM Serial Number	28418275VW
Software Group Part Number	6081399-00
Software Group Release Date	FEB21
Software Group Description	EP-MEUIC_50Hz_PROD_10.2

Product Link Elite (ZNL00294)

Parameter	Value
Product ID	ZNL00294
Machine Serial Number	
Equipment ID	ZNL00294
ECM Part Number	4590786-05
ECM Serial Number	2661F525TR
Software Group Part Number	5754275-00
Software Group Release Date	Mar2019
Software Group Description	VIMS_TELEMATICS_2019_03_06
Application Software Part Number	5672205-00
Cellular Device ECM Serial Number	NA
Cellular Device ECM Hardware Part Number	NA
Cellular Radio Module Software Part Number	NA
Satellite Device ECM Serial Number	NA
Satellite Device ECM Hardware Part Number	NA
Satellite Radio Module Software Part Number	NA
Wi-Fi Radio Hardware Serial Number	NA
Wi-Fi Radio Hardware Part Number	NA
Wi-Fi Radio Software Part Number	NA

3516E Genset - ECM 2 Slave ECM (ZNL00294)

Parameter	Value
Engine Serial Number	ZNL00294
ECM Serial Number	31416064VW
Software Group Part Number	6081399-00
Software Group Release Date	FEB21
Software Group Description	EP-MEUIC_50Hz_PROD_10.2

Digital Voltage Regulator

Parameter	Value
ECM Part Number	3147755-00
ECM Serial Number	28116001GD
Software Group Part Number	3184763-01
Software Group Release Date	NOV2007
Software Group Description	Regulator Software

EMCP 4.4 (CAT00000)

Parameter	Value
ECM Part Number	5034417-00
ECM Serial Number	3151E008TV
Software Group Part Number	6053891-00
Software Group Release Date	NOV2020
Software Group Description	EMCP 4.4 English, v4.11H PROD, 11 November 2020

Digital Pyrometer #1

Parameter	Value
ECM Part Number	3434631-04
ECM Serial Number	2381D024CL
Software Group Part Number	4559451-00
Software Group Release Date	MAR2014
Software Group Description	exhgaspyro

Description	Value	Unit	Min	Max	ECM
TEMP & PRESSION					
Engine Speed	1500	rpm	1495	1505	3516E Genset - ECM 1 Master ECM (ZNL00294)
Engine Coolant Temperature	82	Deg C	82	82	3516E Genset - ECM 1 Master ECM (ZNL00294)
Air Inlet Temperature	28,6	Deg C	28,1	28,6	3516E Genset - ECM 1 Master ECM (ZNL00294)
Intake Manifold Air Temperature	41,9	Deg C	39,7	41,9	3516E Genset - ECM 1 Master ECM (ZNL00294)
Fuel Temperature	29	Deg C	28	29	3516E Genset - ECM 1 Master ECM (ZNL00294)
Engine Oil Temperature	88	Deg C	87	88	3516E Genset - ECM 1 Master ECM (ZNL00294)

Engine Turbocharger #1 Turbine Intake Temperature	638,3	Deg C	632,5	638,6	3516E Genset - ECM 1 Master ECM (ZNL00294)
Engine Turbocharger #2 Turbine Intake Temperature	649,7	Deg C	645,8	649,7	3516E Genset - ECM 1 Master ECM (ZNL00294)
Boost Pressure	30	kPa	29	31	3516E Genset - ECM 1 Master ECM (ZNL00294)
Engine Oil Pressure	639	kPa	638	644	3516E Genset - ECM 1 Master ECM (ZNL00294)
Fuel Pressure	733	kPa	731	734	3516E Genset - ECM 1 Master ECM (ZNL00294)
Barometric Pressure	99,5	kPa	99,5	99,5	3516E Genset - ECM 1 Master ECM (ZNL00294)
Crankcase Pressure	0,0	kPa	-0,1	0,0	3516E Genset - ECM 1 Master ECM (ZNL00294)
Fuel Consumption Rate	215,9	L/h	200,3	222,4	3516E Genset - ECM 1 Master ECM (ZNL00294)
Engine Load Factor	25	%	23	26	3516E Genset - ECM 1 Master ECM (ZNL00294)
Engine Power Derate	0	%	0	0	3516E Genset - ECM 1 Master ECM (ZNL00294)
Battery Voltage	26,5	Volts	26,5	26,5	3516E Genset - ECM 1 Master ECM (ZNL00294)
Engine Oil Filter Differential Pressure	32,0	kPa	31,5	32,0	EMCP 4.4 (CAT00000)
Air Filter #1 Restriction	0,3	kPa	0,3	0,5	3516E Genset - ECM 1 Master ECM (ZNL00294)
Air Filter #2 Restriction	0,4	kPa	0,4	0,6	3516E Genset - ECM 1 Master ECM (ZNL00294)

Hold button has been pressed.

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3516E Genset - ECM 1 Master ECM (ZNL00294)

Parameter	Value
Equipment ID	
Engine Serial Number	ZNL00294
ECM Serial Number	28418275VW
Software Group Part Number	6081399-00
Software Group Release Date	FEB21
Software Group Description	EP-MEUIC_50Hz_PROD_10.2

Product Link Elite (ZNL00294)

Parameter	Value
Product ID	ZNL00294
Machine Serial Number	
Equipment ID	ZNL00294
ECM Part Number	4590786-05
ECM Serial Number	2661F525TR
Software Group Part Number	5754275-00
Software Group Release Date	Mar2019
Software Group Description	VIMS_TELEMATICS_2019_03_06
Application Software Part Number	5672205-00
Cellular Device ECM Serial Number	NA
Cellular Device ECM Hardware Part Number	NA
Cellular Radio Module Software Part Number	NA
Satellite Device ECM Serial Number	NA
Satellite Device ECM Hardware Part Number	NA
Satellite Radio Module Software Part Number	NA
Wi-Fi Radio Hardware Serial Number	NA
Wi-Fi Radio Hardware Part Number	NA
Wi-Fi Radio Software Part Number	NA

3516E Genset - ECM 2 Slave ECM (ZNL00294)

Parameter	Value
Engine Serial Number	ZNL00294
ECM Serial Number	31416064VW
Software Group Part Number	6081399-00
Software Group Release Date	FEB21
Software Group Description	EP-MEUIC_50Hz_PROD_10.2

Digital Voltage Regulator

Parameter	Value
ECM Part Number	3147755-00
ECM Serial Number	28116001GD
Software Group Part Number	3184763-01
Software Group Release Date	NOV2007
Software Group Description	Regulator Software

EMCP 4.4 (CAT00000)

Parameter	Value
ECM Part Number	5034417-00
ECM Serial Number	3151E008TV
Software Group Part Number	6053891-00
Software Group Release Date	NOV2020
Software Group Description	EMCP 4.4 English, v4.11H PROD, 11 November 2020

Digital Pyrometer #1

Parameter	Value
ECM Part Number	3434631-04
ECM Serial Number	2381D024CL
Software Group Part Number	4559451-00
Software Group Release Date	MAR2014
Software Group Description	exhgaspyro

Description	Value	Unit	Min	Max	ECM
EMCP4.4					
Engine Speed	1502	rpm	1494	1502	EMCP 4.4 (CAT00000)
Generator AC Frequency	50,0	Hz	50,0	50,0	EMCP 4.4 (CAT00000)
Generator Phase A RMS Voltage	232	Volts	231	232	EMCP 4.4 (CAT00000)
Generator Phase B RMS Voltage	231	Volts	231	231	EMCP 4.4 (CAT00000)
Generator Phase C RMS Voltage	231	Volts	231	231	EMCP 4.4 (CAT00000)
Generator Phase AB Line-Line AC RMS Voltage	401	Volts	401	402	EMCP 4.4 (CAT00000)
Generator Phase BC Line-Line AC RMS Voltage	400	Volts	399	400	EMCP 4.4 (CAT00000)

Generator Phase CA Line-Line AC RMS Voltage	400	Volts	400	400	EMCP 4.4 (CAT00000)
Generator Phase A RMS Current	1880	Amps	1877	1880	EMCP 4.4 (CAT00000)
Generator Phase B RMS Current	1885	Amps	1884	1888	EMCP 4.4 (CAT00000)
Generator Phase C RMS Current	1894	Amps	1892	1895	EMCP 4.4 (CAT00000)
Generator Total Real Power	1308	kW	1306	1310	EMCP 4.4 (CAT00000)
Generator Overall Power Factor	1,00		1,00	1,00	EMCP 4.4 (CAT00000)
Generator Total Apparent Power	1308	kVA	1307	1309	EMCP 4.4 (CAT00000)
Generator Total Reactive Power	37	kVAr	37	37	EMCP 4.4 (CAT00000)
Generator Excitation Field Current	1,65	Amps	1,60	1,75	Digital Voltage Regulator
Generator Excitation Field Voltage	18,20	Volts	15,35	25,95	Digital Voltage Regulator

Hold button has been pressed.

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Status

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3516E Genset - ECM 1 Master ECM (ZNL00294)

Parameter	Value
Equipment ID	
Engine Serial Number	ZNL00294
ECM Serial Number	28418275VW
Software Group Part Number	6081399-00
Software Group Release Date	FEB21
Software Group Description	EP-MEUIC_50Hz_PROD_10.2

Product Link Elite (ZNL00294)

Parameter	Value
Product ID	ZNL00294
Machine Serial Number	
Equipment ID	ZNL00294
ECM Part Number	4590786-05
ECM Serial Number	2661F525TR
Software Group Part Number	5754275-00
Software Group Release Date	Mar2019
Software Group Description	VIMS_TELEMATICS_2019_03_06
Application Software Part Number	5672205-00
Cellular Device ECM Serial Number	NA
Cellular Device ECM Hardware Part Number	NA
Cellular Radio Module Software Part Number	NA
Satellite Device ECM Serial Number	NA
Satellite Device ECM Hardware Part Number	NA
Satellite Radio Module Software Part Number	NA
Wi-Fi Radio Hardware Serial Number	NA
Wi-Fi Radio Hardware Part Number	NA
Wi-Fi Radio Software Part Number	NA

3516E Genset - ECM 2 Slave ECM (ZNL00294)

Parameter	Value
Engine Serial Number	ZNL00294
ECM Serial Number	31416064VW
Software Group Part Number	6081399-00
Software Group Release Date	FEB21
Software Group Description	EP-MEUIC_50Hz_PROD_10.2

Digital Voltage Regulator

Parameter	Value
ECM Part Number	3147755-00
ECM Serial Number	28116001GD
Software Group Part Number	3184763-01
Software Group Release Date	NOV2007
Software Group Description	Regulator Software

EMCP 4.4 (CAT00000)

Parameter	Value
ECM Part Number	5034417-00
ECM Serial Number	3151E008TV
Software Group Part Number	6053891-00
Software Group Release Date	NOV2020
Software Group Description	EMCP 4.4 English, v4.11H PROD, 11 November 2020

Digital Pyrometer #1

Parameter	Value
ECM Part Number	3434631-04
ECM Serial Number	2381D024CL
Software Group Part Number	4559451-00
Software Group Release Date	MAR2014
Software Group Description	exhgaspyro

Description	Value	Unit	Min	Max	ECM
TEMP & PRESSION					
Engine Speed	1502	rpm	1493	1507	3516E Genset - ECM 1 Master ECM (ZNL00294)
Engine Coolant Temperature	83	Deg C	83	85	3516E Genset - ECM 1 Master ECM (ZNL00294)
Air Inlet Temperature	30,5	Deg C	28,8	30,5	3516E Genset - ECM 1 Master ECM (ZNL00294)
Intake Manifold Air Temperature	39,9	Deg C	39,6	44,8	3516E Genset - ECM 1 Master ECM (ZNL00294)
Fuel Temperature	30	Deg C	29	30	3516E Genset - ECM 1 Master ECM (ZNL00294)
Engine Oil Temperature	90	Deg C	89	91	3516E Genset - ECM 1 Master ECM (ZNL00294)

Engine Turbocharger #1 Turbine Intake Temperature	726,3	Deg C	724,8	738,0	3516E Genset - ECM 1 Master ECM (ZNL00294)
Engine Turbocharger #2 Turbine Intake Temperature	717,8	Deg C	714,3	729,1	3516E Genset - ECM 1 Master ECM (ZNL00294)
Boost Pressure	114	kPa	109	116	3516E Genset - ECM 1 Master ECM (ZNL00294)
Engine Oil Pressure	624	kPa	622	629	3516E Genset - ECM 1 Master ECM (ZNL00294)
Fuel Pressure	699	kPa	696	700	3516E Genset - ECM 1 Master ECM (ZNL00294)
Barometric Pressure	99,5	kPa	99,5	99,5	3516E Genset - ECM 1 Master ECM (ZNL00294)
Crankcase Pressure	0,1	kPa	0,0	0,1	3516E Genset - ECM 1 Master ECM (ZNL00294)
Fuel Consumption Rate	349,3	L/h	334,6	356,6	3516E Genset - ECM 1 Master ECM (ZNL00294)
Engine Load Factor	48	%	47	52	3516E Genset - ECM 1 Master ECM (ZNL00294)
Engine Power Derate	0	%	0	0	3516E Genset - ECM 1 Master ECM (ZNL00294)
Battery Voltage	26,5	Volts	26,0	26,5	3516E Genset - ECM 1 Master ECM (ZNL00294)
Engine Oil Filter Differential Pressure	33,0	kPa	32,5	33,5	EMCP 4.4 (CAT00000)
Air Filter #1 Restriction	0,9	kPa	0,8	1,0	3516E Genset - ECM 1 Master ECM (ZNL00294)
Air Filter #2 Restriction	1,1	kPa	1,0	1,2	3516E Genset - ECM 1 Master ECM (ZNL00294)

Hold button has been pressed.

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Status

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3516E Genset - ECM 1 Master ECM (ZNL00294)

Parameter	Value
Equipment ID	
Engine Serial Number	ZNL00294
ECM Serial Number	28418275VW
Software Group Part Number	6081399-00
Software Group Release Date	FEB21
Software Group Description	EP-MEUIC_50Hz_PROD_10.2

Product Link Elite (ZNL00294)

Parameter	Value
Product ID	ZNL00294
Machine Serial Number	
Equipment ID	ZNL00294
ECM Part Number	4590786-05
ECM Serial Number	2661F525TR
Software Group Part Number	5754275-00
Software Group Release Date	Mar2019
Software Group Description	VIMS_TELEMATICS_2019_03_06
Application Software Part Number	5672205-00
Cellular Device ECM Serial Number	NA
Cellular Device ECM Hardware Part Number	NA
Cellular Radio Module Software Part Number	NA
Satellite Device ECM Serial Number	NA
Satellite Device ECM Hardware Part Number	NA
Satellite Radio Module Software Part Number	NA
Wi-Fi Radio Hardware Serial Number	NA
Wi-Fi Radio Hardware Part Number	NA
Wi-Fi Radio Software Part Number	NA

3516E Genset - ECM 2 Slave ECM (ZNL00294)

Parameter	Value
Engine Serial Number	ZNL00294
ECM Serial Number	31416064VW
Software Group Part Number	6081399-00
Software Group Release Date	FEB21
Software Group Description	EP-MEUIC_50Hz_PROD_10.2

Digital Voltage Regulator

Parameter	Value
ECM Part Number	3147755-00
ECM Serial Number	28116001GD
Software Group Part Number	3184763-01
Software Group Release Date	NOV2007
Software Group Description	Regulator Software

EMCP 4.4 (CAT00000)

Parameter	Value
ECM Part Number	5034417-00
ECM Serial Number	3151E008TV
Software Group Part Number	6053891-00
Software Group Release Date	NOV2020
Software Group Description	EMCP 4.4 English, v4.11H PROD, 11 November 2020

Digital Pyrometer #1

Parameter	Value
ECM Part Number	3434631-04
ECM Serial Number	2381D024CL
Software Group Part Number	4559451-00
Software Group Release Date	MAR2014
Software Group Description	exhgaspyro

Description	Value	Unit	Min	Max	ECM
EMCP4.4					
Engine Speed	1500	rpm	1495	1504	EMCP 4.4 (CAT00000)
Generator AC Frequency	50,0	Hz	50,0	50,0	EMCP 4.4 (CAT00000)
Generator Phase A RMS Voltage	231	Volts	231	232	EMCP 4.4 (CAT00000)
Generator Phase B RMS Voltage	231	Volts	231	231	EMCP 4.4 (CAT00000)
Generator Phase C RMS Voltage	231	Volts	231	231	EMCP 4.4 (CAT00000)
Generator Phase AB Line-Line AC RMS Voltage	401	Volts	401	402	EMCP 4.4 (CAT00000)
Generator Phase BC Line-Line AC RMS Voltage	400	Volts	399	400	EMCP 4.4 (CAT00000)

Generator Phase CA Line-Line AC RMS Voltage	400	Volts	400	400	EMCP 4.4 (CAT00000)
Generator Phase A RMS Current	2818	Amps	2817	2822	EMCP 4.4 (CAT00000)
Generator Phase B RMS Current	2836	Amps	2832	2836	EMCP 4.4 (CAT00000)
Generator Phase C RMS Current	2849	Amps	2848	2852	EMCP 4.4 (CAT00000)
Generator Total Real Power	1963	kW	1962	1968	EMCP 4.4 (CAT00000)
Generator Overall Power Factor	1,00		1,00	1,00	EMCP 4.4 (CAT00000)
Generator Total Apparent Power	1965	kVA	1964	1968	EMCP 4.4 (CAT00000)
Generator Total Reactive Power	73	kVAr	73	73	EMCP 4.4 (CAT00000)
Generator Excitation Field Current	2,15	Amps	2,05	2,15	Digital Voltage Regulator
Generator Excitation Field Voltage	30,00	Volts	19,45	30,80	Digital Voltage Regulator

Hold button has been pressed.

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Status

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3516E Genset - ECM 1 Master ECM (ZNL00294)

Parameter	Value
Equipment ID	
Engine Serial Number	ZNL00294
ECM Serial Number	28418275VW
Software Group Part Number	6081399-00
Software Group Release Date	FEB21
Software Group Description	EP-MEUIC_50Hz_PROD_10.2

Product Link Elite (ZNL00294)

Parameter	Value
Product ID	ZNL00294
Machine Serial Number	
Equipment ID	ZNL00294
ECM Part Number	4590786-05
ECM Serial Number	2661F525TR
Software Group Part Number	5754275-00
Software Group Release Date	Mar2019
Software Group Description	VIMS_TELEMATICS_2019_03_06
Application Software Part Number	5672205-00
Cellular Device ECM Serial Number	NA
Cellular Device ECM Hardware Part Number	NA
Cellular Radio Module Software Part Number	NA
Satellite Device ECM Serial Number	NA
Satellite Device ECM Hardware Part Number	NA
Satellite Radio Module Software Part Number	NA
Wi-Fi Radio Hardware Serial Number	NA
Wi-Fi Radio Hardware Part Number	NA
Wi-Fi Radio Software Part Number	NA

3516E Genset - ECM 2 Slave ECM (ZNL00294)

Parameter	Value
Engine Serial Number	ZNL00294
ECM Serial Number	31416064VW
Software Group Part Number	6081399-00
Software Group Release Date	FEB21
Software Group Description	EP-MEUIC_50Hz_PROD_10.2

Digital Voltage Regulator

Parameter	Value
ECM Part Number	3147755-00
ECM Serial Number	28116001GD
Software Group Part Number	3184763-01
Software Group Release Date	NOV2007
Software Group Description	Regulator Software

EMCP 4.4 (CAT00000)

Parameter	Value
ECM Part Number	5034417-00
ECM Serial Number	3151E008TV
Software Group Part Number	6053891-00
Software Group Release Date	NOV2020
Software Group Description	EMCP 4.4 English, v4.11H PROD, 11 November 2020

Digital Pyrometer #1

Parameter	Value
ECM Part Number	3434631-04
ECM Serial Number	2381D024CL
Software Group Part Number	4559451-00
Software Group Release Date	MAR2014
Software Group Description	exhgaspyro

Description	Value	Unit	Min	Max	ECM
TEMP & PRESSION					
Engine Speed	1503	rpm	1425	1515	3516E Genset - ECM 1 Master ECM (ZNL00294)
Engine Coolant Temperature	84	Deg C	83	85	3516E Genset - ECM 1 Master ECM (ZNL00294)
Air Inlet Temperature	30,6	Deg C	29,5	30,7	3516E Genset - ECM 1 Master ECM (ZNL00294)
Intake Manifold Air Temperature	39,6	Deg C	39,3	41,6	3516E Genset - ECM 1 Master ECM (ZNL00294)
Fuel Temperature	31	Deg C	30	31	3516E Genset - ECM 1 Master ECM (ZNL00294)
Engine Oil Temperature	92	Deg C	89	92	3516E Genset - ECM 1 Master ECM (ZNL00294)

Engine Turbocharger #1 Turbine Intake Temperature	669,8	Deg C	662,7	774,5	3516E Genset - ECM 1 Master ECM (ZNL00294)
Engine Turbocharger #2 Turbine Intake Temperature	652,6	Deg C	644,8	768,8	3516E Genset - ECM 1 Master ECM (ZNL00294)
Boost Pressure	262	kPa	113	278	3516E Genset - ECM 1 Master ECM (ZNL00294)
Engine Oil Pressure	606	kPa	606	625	3516E Genset - ECM 1 Master ECM (ZNL00294)
Fuel Pressure	671	kPa	658	699	3516E Genset - ECM 1 Master ECM (ZNL00294)
Barometric Pressure	99,5	kPa	99,5	99,5	3516E Genset - ECM 1 Master ECM (ZNL00294)
Crankcase Pressure	0,3	kPa	0,0	0,3	3516E Genset - ECM 1 Master ECM (ZNL00294)
Fuel Consumption Rate	547,2	L/h	336,5	618,2	3516E Genset - ECM 1 Master ECM (ZNL00294)
Engine Load Factor	70	%	47	81	3516E Genset - ECM 1 Master ECM (ZNL00294)
Engine Power Derate	0	%	0	0	3516E Genset - ECM 1 Master ECM (ZNL00294)
Battery Voltage	26,0	Volts	26,0	26,5	3516E Genset - ECM 1 Master ECM (ZNL00294)
Engine Oil Filter Differential Pressure	35,0	kPa	33,0	35,0	EMCP 4.4 (CAT00000)
Air Filter #1 Restriction	2,2	kPa	0,9	2,4	3516E Genset - ECM 1 Master ECM (ZNL00294)
Air Filter #2 Restriction	2,7	kPa	1,1	3,0	3516E Genset - ECM 1 Master ECM (ZNL00294)

Hold button has been pressed.

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Status

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3516E Genset - ECM 1 Master ECM (ZNL00294)

Parameter	Value
Equipment ID	
Engine Serial Number	ZNL00294
ECM Serial Number	28418275VW
Software Group Part Number	6081399-00
Software Group Release Date	FEB21
Software Group Description	EP-MEUIC_50Hz_PROD_10.2

Product Link Elite (ZNL00294)

Parameter	Value
Product ID	ZNL00294
Machine Serial Number	
Equipment ID	ZNL00294
ECM Part Number	4590786-05
ECM Serial Number	2661F525TR
Software Group Part Number	5754275-00
Software Group Release Date	Mar2019
Software Group Description	VIMS_TELEMATICS_2019_03_06
Application Software Part Number	5672205-00
Cellular Device ECM Serial Number	NA
Cellular Device ECM Hardware Part Number	NA
Cellular Radio Module Software Part Number	NA
Satellite Device ECM Serial Number	NA
Satellite Device ECM Hardware Part Number	NA
Satellite Radio Module Software Part Number	NA
Wi-Fi Radio Hardware Serial Number	NA
Wi-Fi Radio Hardware Part Number	NA
Wi-Fi Radio Software Part Number	NA

3516E Genset - ECM 2 Slave ECM (ZNL00294)

Parameter	Value
Engine Serial Number	ZNL00294
ECM Serial Number	31416064VW
Software Group Part Number	6081399-00
Software Group Release Date	FEB21
Software Group Description	EP-MEUIC_50Hz_PROD_10.2

Digital Voltage Regulator

Parameter	Value
ECM Part Number	3147755-00
ECM Serial Number	28116001GD
Software Group Part Number	3184763-01
Software Group Release Date	NOV2007
Software Group Description	Regulator Software

EMCP 4.4 (CAT00000)

Parameter	Value
ECM Part Number	5034417-00
ECM Serial Number	3151E008TV
Software Group Part Number	6053891-00
Software Group Release Date	NOV2020
Software Group Description	EMCP 4.4 English, v4.11H PROD, 11 November 2020

Digital Pyrometer #1

Parameter	Value
ECM Part Number	3434631-04
ECM Serial Number	2381D024CL
Software Group Part Number	4559451-00
Software Group Release Date	MAR2014
Software Group Description	exhgaspyro

Description	Value	Unit	Min	Max	ECM
EMCP4.4					
Engine Speed	1501	rpm	1495	1503	EMCP 4.4 (CAT00000)
Generator AC Frequency	50,0	Hz	50,0	50,0	EMCP 4.4 (CAT00000)
Generator Phase A RMS Voltage	231	Volts	231	232	EMCP 4.4 (CAT00000)
Generator Phase B RMS Voltage	231	Volts	231	231	EMCP 4.4 (CAT00000)
Generator Phase C RMS Voltage	231	Volts	231	231	EMCP 4.4 (CAT00000)
Generator Phase AB Line-Line AC RMS Voltage	401	Volts	401	402	EMCP 4.4 (CAT00000)
Generator Phase BC Line-Line AC RMS Voltage	400	Volts	400	400	EMCP 4.4 (CAT00000)

Generator Phase CA Line-Line AC RMS Voltage	400	Volts	400	400	EMCP 4.4 (CAT00000)
Generator Phase A RMS Current	3767	Amps	3764	3768	EMCP 4.4 (CAT00000)
Generator Phase B RMS Current	3799	Amps	3799	3803	EMCP 4.4 (CAT00000)
Generator Phase C RMS Current	3829	Amps	3825	3829	EMCP 4.4 (CAT00000)
Generator Total Real Power	2630	kW	2628	2634	EMCP 4.4 (CAT00000)
Generator Overall Power Factor	1,00		1,00	1,00	EMCP 4.4 (CAT00000)
Generator Total Apparent Power	2634	kVA	2632	2636	EMCP 4.4 (CAT00000)
Generator Total Reactive Power	123	kVAr	122	123	EMCP 4.4 (CAT00000)
Generator Excitation Field Current	2,80	Amps	2,70	2,80	Digital Voltage Regulator
Generator Excitation Field Voltage	36,45	Volts	28,20	37,45	Digital Voltage Regulator

Hold button has been pressed.

Cat Electronic Technician 2022A v1.0

Status

13/09/2022 15:05

3516E Genset - ECM 1 Master ECM (ZNL00294)

Parameter	Value
Equipment ID	
Engine Serial Number	ZNL00294
ECM Serial Number	28418275VW
Software Group Part Number	6081399-00
Software Group Release Date	FEB21
Software Group Description	EP-MEUIC_50Hz_PROD_10.2

Product Link Elite (ZNL00294)

Parameter	Value
Product ID	ZNL00294
Machine Serial Number	
Equipment ID	ZNL00294
ECM Part Number	4590786-05
ECM Serial Number	2661F525TR
Software Group Part Number	5754275-00
Software Group Release Date	Mar2019
Software Group Description	VIMS_TELEMATICS_2019_03_06
Application Software Part Number	5672205-00
Cellular Device ECM Serial Number	NA
Cellular Device ECM Hardware Part Number	NA
Cellular Radio Module Software Part Number	NA
Satellite Device ECM Serial Number	NA
Satellite Device ECM Hardware Part Number	NA
Satellite Radio Module Software Part Number	NA
Wi-Fi Radio Hardware Serial Number	NA
Wi-Fi Radio Hardware Part Number	NA
Wi-Fi Radio Software Part Number	NA

3516E Genset - ECM 2 Slave ECM (ZNL00294)

Parameter	Value
Engine Serial Number	ZNL00294
ECM Serial Number	31416064VW
Software Group Part Number	6081399-00
Software Group Release Date	FEB21
Software Group Description	EP-MEUIC_50Hz_PROD_10.2

Digital Voltage Regulator

Parameter	Value
ECM Part Number	3147755-00
ECM Serial Number	28116001GD
Software Group Part Number	3184763-01
Software Group Release Date	NOV2007
Software Group Description	Regulator Software

EMCP 4.4 (CAT00000)

Parameter	Value
ECM Part Number	5034417-00
ECM Serial Number	3151E008TV
Software Group Part Number	6053891-00
Software Group Release Date	NOV2020
Software Group Description	EMCP 4.4 English, v4.11H PROD, 11 November 2020

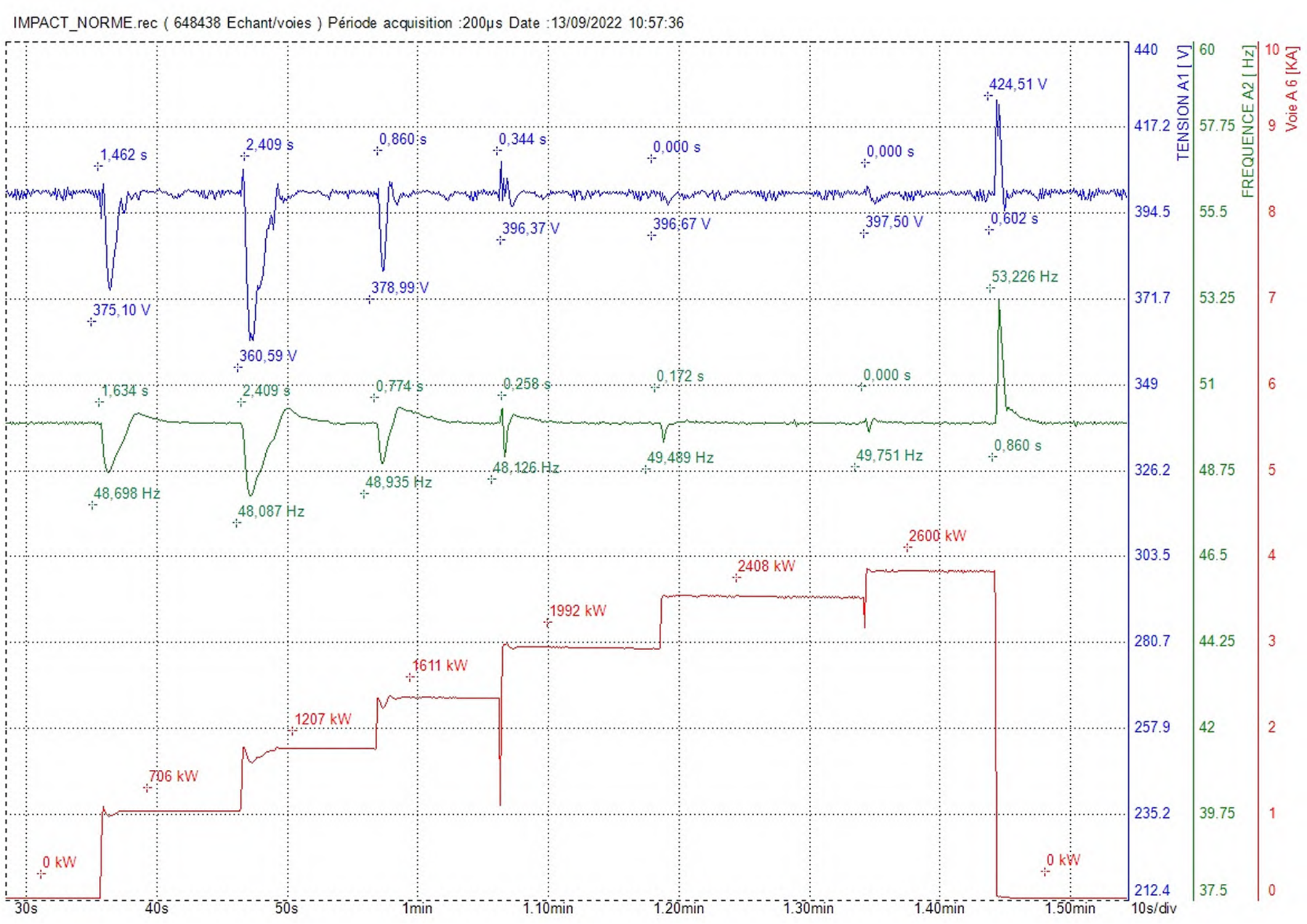
Digital Pyrometer #1

Parameter	Value
ECM Part Number	3434631-04
ECM Serial Number	2381D024CL
Software Group Part Number	4559451-00
Software Group Release Date	MAR2014
Software Group Description	exhgaspyro

Description	Value	Unit	Min	Max	ECM
TEMP & PRESSION					
Engine Speed	1500	rpm	1494	1505	3516E Genset - ECM 1 Master ECM (ZNL00294)
Engine Coolant Temperature	91	Deg C	87	199	3516E Genset - ECM 1 Master ECM (ZNL00294)
Air Inlet Temperature	33,4	Deg C	30,6	34,0	3516E Genset - ECM 1 Master ECM (ZNL00294)
Intake Manifold Air Temperature	46,9	Deg C	43,0	48,2	3516E Genset - ECM 1 Master ECM (ZNL00294)
Fuel Temperature	38	Deg C	32	38	3516E Genset - ECM 1 Master ECM (ZNL00294)
Engine Oil Temperature	99	Deg C	95	99	3516E Genset - ECM 1 Master ECM (ZNL00294)

Engine Turbocharger #1 Turbine Intake Temperature	700,3	Deg C	691,6	703,5	3516E Genset - ECM 1 Master ECM (ZNL00294)
Engine Turbocharger #2 Turbine Intake Temperature	680,0	Deg C	671,0	683,6	3516E Genset - ECM 1 Master ECM (ZNL00294)
Boost Pressure	337	kPa	333	341	3516E Genset - ECM 1 Master ECM (ZNL00294)
Engine Oil Pressure	580	kPa	580	591	3516E Genset - ECM 1 Master ECM (ZNL00294)
Fuel Pressure	637	kPa	634	646	3516E Genset - ECM 1 Master ECM (ZNL00294)
Barometric Pressure	99,5	kPa	99,5	99,5	3516E Genset - ECM 1 Master ECM (ZNL00294)
Crankcase Pressure	0,3	kPa	0,2	0,3	3516E Genset - ECM 1 Master ECM (ZNL00294)
Fuel Consumption Rate	696,6	L/h	691,2	724,8	3516E Genset - ECM 1 Master ECM (ZNL00294)
Engine Load Factor	93	%	89	94	3516E Genset - ECM 1 Master ECM (ZNL00294)
Engine Power Derate	0	%	0	0	3516E Genset - ECM 1 Master ECM (ZNL00294)
Battery Voltage	26,5	Volts	26,5	26,5	3516E Genset - ECM 1 Master ECM (ZNL00294)
Engine Oil Filter Differential Pressure	37,0	kPa	36,0	37,5	EMCP 4.4 (CAT00000)
Air Filter #1 Restriction	3,0	kPa	2,9	3,2	3516E Genset - ECM 1 Master ECM (ZNL00294)
Air Filter #2 Restriction	3,8	kPa	3,6	3,9	3516E Genset - ECM 1 Master ECM (ZNL00294)

Hold button has been pressed.


IMPACT_NORME.rec (648438 Echant/voies) Période acquisition :200µs Date :13/09/2022 10:57:36
TENSION A1 [V]
FREQUENCE A2 [Hz]
Voie A 6 [KA]
440
417.2
394.5
371.7
349
326.2
303.5
280.7
257.9
235.2
212.4
60
57.75
55.5
53.25
51
48.75
46.5
44.25
42
39.75
37.5
10
9
8
7
6
5
4
3
2
1
0
1,462 s
375,10 V
2,409 s
360,59 V
0,860 s
378,99 V
0,344 s
396,37 V
0,000 s
396,67 V
0,000 s
397,50 V
424,51 V
0,602 s
1,634 s
48,698 Hz
2,409 s
48,087 Hz
0,774 s
48,935 Hz
0,258 s
48,126 Hz
0,172 s
49,489 Hz
0,000 s
49,751 Hz
53,226 Hz
0,860 s
0 kW
706 kW
1207 kW
1611 kW
1992 kW
2408 kW
2600 kW
0 kW
30s
40s
50s
1min
1.10min
1.20min
1.30min
1.40min
1.50min
10s/div

Proprietà

DATA 4 ITALY

Progetto

DC 07
MILAN

Supervisore delegato del committente

GIS.IMO S.r.l.
centro direzionale quattrotorri
06132 PERUGIA
Tél. : +39 075 517 29 83
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Assistente del committente

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Progetto architettonico

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Opere edili e prefabbricati

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Impianti meccanici

OMEGA CONCEPT IMPIANTI E SISTEMI S.p.a.
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Tél. : +39 02 8180951
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impianti elettrici/dati

ENGIE CONTRACTING ITALIA S.r.l.
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SCHNEIDER ELECTRIC S.p.A.
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Progettazione antincendio

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Supervisione

ITALSOCOTEC S.p.a.
Via Pontaccio,12/A- 20121 Milano
italsocotec@italsocotec.it
Tél. : +39 02 89051500
Fax : +39 02 89051501

Cod	Data	Descrizione
	16/11/2022	

DATA 4 ITALY - DC07 Milan
Commissioning Level 1 - Grey tag
FAT GED

PARAMETERS

IDENTIFICATION	
Customer	DATA4
Project	DC07 MILAN GED
Date	28/09/2022
Eneria Department	BU DATA CENTER
Genset type	3516EHD-3250kVA
Genset S/N	CAT3516EAZNL00277
Power	3250/2600
Rating	STANDBY
Eneria OT number	380302

ENGINE	MANUFACTURER :	
Type :	Theoretical Plate	Final Plate
Serial Number	ZNL00277	
AR Number	5930146	
Altitude max	2953m	
Rack travel	FLS(0)/FTS(0)	
Power : HP / KW	3032kW	
No-load Speed	1515	
On-load Speed	1500	
Setting	NA	

ENGINE REGULATION	
Manufacturer	CAT ADEM5E4
Model	ELECTRONIQUE/EUI
Actuator Number	ECM
Serial Number	31416109VW
Regulator Number	N/A
Serial Number	N/A
Spring Number	N/A

TURBOCHARGER	
Aftercooler	CAT
Number of turbos	4
Turbos manufacturer	CAT
Serial Number	555-0590

INJECTION	PUMP INJECTOR
Injector Number	5816-969

ENGINE CONTROL PANEL
EMCP4.4
GENERATOR
VOLTAGE / CURRENT/ FREQUENCY
KW / KVA / KVAr / P.f.
TOTAL KW% / KVA% / KVAr%
KWh / KVArh
EXCITATION FIELD VOLTAGE / CURRENT
ENGINE :
OIL PRESSURE / COOLANT TEMPERATURE
ENGINE SPEED / BATTERY VOLTAGE
TOTAL LAUNCH / TOTAL START
TEMPERATURE ECHAPPEMENT G-D
FUEL PRESSURE / OIL PRESSURE
BOOST PRESSURE / OIL TEMPERATURE
OIL, FUEL, AIR FILTER CLOGGING
FUEL CONSUMPTION RATE

RADIATOR	
Manufacturer	CAT
Part Number	575-1571
Reference	N/A
Serial Number	25213547
Power	N/A
Pulley Wheel Ratio	N/A
Belt Number	N/A

AIR-COOLER	
Manufacturer	N/A
Fan	N/A
Blades diameter	N/A
Power	N/A
Electrical Motor	N/A

AIR COOLER TEST BANCH

STARTING					
Main starter	Manufac.	CAT X2 352-9766	Type	24V/CW
Secondary starter	Manufac.	CAT X1 352-9766	Type	24V/CW
Alternator	Manufac.	CAT X1 561-2986	Volts/Amps	24V/50A

WATER HEATER			Pump		Thermostat	
Manufacturer	ENERIA					
Power	9kW	Manufac.	WILO	Manufacturer	DANFOSS
Voltage	400V	Voltage	230V	Setting	60°C

DRAWINGS	
Engine CAT N°	491-3960
Genset CAT N°	552-6069
Genset Eneria N°	E-7021-1
Genset Eneria N°	N/A
Switchgear Eneria N	N/A
Other Eneria N°	N/A

LIQUIDS	
Fuel LHV	10150KG cal/Kg
Fuel Density	0.88 Kg/L
Coolant	TEST BENCH
Lube oil	ORIGIN

GENERATOR	MANUFACTURER :	CATERPILLAR
Type :	Theoretical Plate	Final Plate
Serial Number	4Y702035	
AR Number	585-1976	
Frame Number	N/A	
Power kVA / kW	3250/2600	
Duty cycle	STANDBY	
Frequency	50HZ	
Temperature Max	150	
Efficiency	N/A	
Regulator type	CDVR	
Reference	314-7755	
Serial Number	22116047GD	
Excitation type	PERMANENT MAGNETS	

PARAMETERS

IDENTIFICATION	
Customer	DATA4
Project	DC07 MILAN GED
Date	28 septembre 2022

TEST	
Test Date	30/09/2022
Test Supervisor	B004386

DISPLAY	Gauge
Voltmeter	0-400V
Frequencymeter	0-99HZ
Ammeter	0-5000A
Current transfo.	5000/5A
Wattmeter	0-2000 KW
Current transfo.	5000/5A
Water Temp.	CAT
Lube Oil Pressure	CAT
Lube Oil Temp.	CAT
Speed	CAT
Battery Voltage	CAT
Charge Air Pressure	CAT
Exhaust Temp.	N/A

EQUIPMENTS			
Control Panel	EMCP 4.4	Battery charger	N/A
Cabinet	N/A	Ref / Serial N°	N/A
Transfer Switch	N/A	Earth Fault	N/A
Circuit Breaker	N/A	Ref	N/A
Coupler	N/A	Speed relay manuf.	EMCP 4.4
Ref / Serial N°	N/A	Ref	503-4417-02
Load Sharing	N/A	Serial N°	2631E032TV
Ref / Serial N°	N/A	Starter Stop	400TR/MN
Power Return	EMCP 4.4	Shut-off Valve	N/A
Ref	503-4417-02	Injection	CAT
Protection Board	EMCP 4.4	Air	N/A
Ref	503-4417-02		
Serial N°	2631E032TV		

SETTINGS

DISPLAY	Théoretical Value	Tolerance	Checking
Voltage (V)	400	+/-5%	√
Frequency (Hz)	50	+/-2%	√
Current (I)	3609	+/-1%	√
Power (kVA)	2500	+/-1%	√
Water Temp. (°C)	89	+/-5%	√
LubeOil Pres. (kPa)	376	+/-5%	√
LubeOil Temp (°C)	N/A	+/-5%	/
Speed (tr/min)	1500	+/-5%	√
Battery Voltage (V)	27	+/-5%	√
Charge Air Pres. (kPa)	260	+/-5%	√
Exhaust Temp. (°C)	690	+/-5%	√

SECURITIES	Type	Level	Checking
Low Oil Pressure	SENSOR	205KPA	√
High Water Temp.	SENSOR	107°C	√
Low Oil Level	MURPHY	N/A	/
Low Coolant Level	N/A	N/A	/
High Oil Temp.	N/A	N/A	/
Overspeed	SENSOR	1770Tr/mn	√
Overcranck	CYCLES	5	√
Generator Temp.	N/A	N/A	/
Emergency Stop	PUSH BUTTON	NA	√
Over/Under Voltage	%	110/85	/
Over/Under Freq.	%	110/90	/
Overcurrent	%	105	/
Earth Protection	N/A	N/A	/
Power return	%	10	/
ALARMS			
Low Oil Pressure	SENSOR	239KPA	√
High Water Temp.	SENSOR	102°C	√
High Oil Temp.	N/A	N/A	/
Overspeed	%	105/90	/
Low Fuel Level	%	105/95	/
Low Water Temp.	SENSOR	21°C	√

COMMENTS	VISA / DATE

Eneria CAT
Moteurs et Groupes électrogènes

Witness Tests
QUAL FOR 10 / 03

IDENTIFICATION	
Customer	DATA4
Project	DC07 MILAN GED
Genset S/N	CAT3516EAZNL00277

TEST	
Test Date	30/09/2022
Test Supervisor	B004386

LOAD PERFORMANCE TESTS

TIMER	
Before tests	1,8 Hrs
After tests	3,9 Hrs

TESTS PARAMETERS	
Atmospheric Pres.	750,8 mm Hg
Ambiant Temp.	12°C
Charge Air Temp	
Left Air Filter	42,3°C
Right Air Filter	38,4°C

FULL LOAD VALUES			
Oil Dif. Pressure	36 kPa	Actuator Voltage	
Fuel Dif. Pressure	N/A	No-load	N/A
Air Intake Temp.	40°C	Full load	N/A
Pressure Drop		Pick-up Voltage	N/A
Left Air Filter	2,9 kPa		
Right Air Filter	3,6 kPa		

VALUES

Duration (hours)	Power (kW)	Voltage (V)	Current (A)	Frequency (Hz)	Cos Ø	Excitation Voltage (V)	Charge Air Pressure (bars)		Exhaust Temp. (°C)		Oil Pressure (bars or kPa)	Water Temp (°C)	Fuel Pres. (bars or kPa)	Oil Temp. (°C)
							L	R	L	R				
15 mn	750 (25%)	400	1086	50	1	17,5	N/A	42	355,1	339,5	635	83	768	87
15 mn	1300 (50%)	400	1895	50	1	16,45	N/A	120	400,6	389,9	612	83	743	89
15 mn	2050 (75%)	400	2994	50	1	21,75	N/A	282	372,8	356,9	600	84	708	91
60 mn	2600 (100%)	400	3817	50	1	21,8	N/A	337	383,1	370	581	87	686	95

COMMENTS	VISA / DATE

Eneria CAT
Moteurs et Groupes électrogènes

Procès Verbal
QUAL FOR 10 / 03

Fournisseur : *Supplier :*	N° du Procès Verbal : *Certificate Number :* 2018-01-001
Usine : *Works :*	Nombre de pages : *Number of sheets :*
Client : *Customer :* DATA4	**PROCES VERBAL DE RECETTE DE CONFORMITE AUX STIPULATIONS D'UNE COMMANDE ETABLI PAR L'INDUSTRIEL FOURNISSEUR** ***CERTIFICATE OF TESTS OF CONFORMITY TO THE STIPULATIONS OF AN ORDER ESTABLISHED BY THE INDUSTRIAL SUPPLIER***
N° de commande : *Order N° :* 380302	
Nom du projet : *Project name :* DC07 MILAN GED	

Désignation *Designation*	Référence ou type *Reference or type*	Quantité *Quantity*	N° de série ou lot *Serial or batch N°*	N° de plan Drawing N°
Groupe électrogene	3516EHD-3250kVA	1	CAT3516EAZNL00277	491-3960 552-6069 E-7021-1

N° du Procès Verbal :
Certificate Number : 2018-01-001

Nous certifions que, sauf exceptions ou dérogations énumérées ci-après, la fourniture citée ci-dessus a été fabriquée conformément aux spécifications techniques du marché, commande ou sous-commande du client et que, toutes opérations de contrôle et d'essais effectuées, la fourniture répond, SOUS TOUS SES ASPECTS, à la commande, aux spécifications particulières ci-jointes, aux plans, ainsi qu'aux normes et règlements en vigueur s'y rapportant.

We certify that, subject to exceptions or concessions listed hereafter, the supplies detailed hereover were manufactured in accordance with the technical specifications of the contract, order or sub-order, and that all inspection operations and tests having been completed, the supplies comply IN EVERY RESPECT with the order, the relevant particular specifications, drawings and relevant standards and regulations in force.

☐ sans aucune réserve ou non-conformité
without any reservation or non-conformity

☐ avec les réserves ou non-conformités suivantes
with the following reservations or non-conformity

N° du Procès Verbal :	
Certificate Number :	2018-01-001

VISAS - SIGNATURES

CONTRÔLE FOURNISSEUR *SUPPLIER'S INSPECTION*	CONTRÔLE CLIENT *CUSTOMER'S INSPECTION*
Nom et fonction : *Name and function :* R. VATIER Responsable Logistique	Nom et fonction : *Name and function :*
Date : 13/12/18 Signature :	Date : Signature :

Eneria
Service Commercial
Rue de Longpont - BP 10202
91311 MONTLHERY
Tél. 01 69 80 22 70 - Fax 01 69 80 21 90
Siret 352 774 079 00029 - APE 4669B

Cat Electronic Technician 2022A v1.0

Status

30/09/2022 08:46

Product Link Elite (ZNL00277)

Parameter	Value
Product ID	ZNL00277
Machine Serial Number	
Equipment ID	ZNL00277
ECM Part Number	4590786-04
ECM Serial Number	2081F520TR
Software Group Part Number	5754275-00
Software Group Release Date	Mar2019
Software Group Description	VIMS_TELEMATICS_2019_03_06
Application Software Part Number	5672205-00
Cellular Device ECM Serial Number	NA
Cellular Device ECM Hardware Part Number	NA
Cellular Radio Module Software Part Number	NA
Satellite Device ECM Serial Number	NA
Satellite Device ECM Hardware Part Number	NA
Satellite Radio Module Software Part Number	NA
Wi-Fi Radio Hardware Serial Number	NA
Wi-Fi Radio Hardware Part Number	NA
Wi-Fi Radio Software Part Number	NA

3516E Genset - ECM 1 Master ECM (ZNL00277)

Parameter	Value
Equipment ID	
Engine Serial Number	ZNL00277
ECM Serial Number	31416109VW
Software Group Part Number	6081399-00
Software Group Release Date	FEB21
Software Group Description	EP-MEUIC_50Hz_PROD_10.2

3516E Genset - ECM 2 Slave ECM (ZNL00277)

Parameter	Value
Engine Serial Number	ZNL00277
ECM Serial Number	31416063VW
Software Group Part Number	6081399-00
Software Group Release Date	FEB21
Software Group Description	EP-MEUIC_50Hz_PROD_10.2

Digital Voltage Regulator

Parameter	Value
ECM Part Number	3147755-00
ECM Serial Number	22116047GD
Software Group Part Number	3184763-01
Software Group Release Date	NOV2007
Software Group Description	Regulator Software

EMCP 4.4 (CAT00000)

Parameter	Value
ECM Part Number	5034417-00
ECM Serial Number	2631E032TV
Software Group Part Number	6053891-00
Software Group Release Date	NOV2020
Software Group Description	EMCP 4.4 English, v4.11H PROD, 11 November 2020

Digital Pyrometer #1

Parameter	Value
ECM Part Number	3434631-04
ECM Serial Number	2961D024CL
Software Group Part Number	4559451-00
Software Group Release Date	MAR2014
Software Group Description	exhgaspyro

Description	Value	Unit	Min	Max	ECM
EMCP4.4					
Engine Speed	1500	rpm	1499	1501	EMCP 4.4 (CAT00000)
Generator AC Frequency	50,0	Hz	50,0	50,0	EMCP 4.4 (CAT00000)
Generator Phase A RMS Voltage	231	Volts	231	232	EMCP 4.4 (CAT00000)
Generator Phase B RMS Voltage	231	Volts	231	231	EMCP 4.4 (CAT00000)
Generator Phase C RMS Voltage	230	Volts	230	231	EMCP 4.4 (CAT00000)
Generator Phase AB Line-Line AC RMS Voltage	401	Volts	400	401	EMCP 4.4 (CAT00000)
Generator Phase BC Line-Line AC RMS Voltage	399	Volts	399	400	EMCP 4.4 (CAT00000)

Generator Phase CA Line-Line AC RMS Voltage	400	Volts	400	401	EMCP 4.4 (CAT00000)
Generator Phase A RMS Current	1085	Amps	1084	1087	EMCP 4.4 (CAT00000)
Generator Phase B RMS Current	1085	Amps	1084	1087	EMCP 4.4 (CAT00000)
Generator Phase C RMS Current	1088	Amps	1087	1090	EMCP 4.4 (CAT00000)
Generator Total Real Power	752	kW	751	755	EMCP 4.4 (CAT00000)
Generator Overall Power Factor	1,00		1,00	1,00	EMCP 4.4 (CAT00000)
Generator Total Apparent Power	752	kVA	752	755	EMCP 4.4 (CAT00000)
Generator Total Reactive Power	16	kVAr	16	16	EMCP 4.4 (CAT00000)
Generator Excitation Field Current	1,40	Amps	1,25	1,40	Digital Voltage Regulator
Generator Excitation Field Voltage	17,50	Volts	10,40	18,95	Digital Voltage Regulator

Cat Electronic Technician 2022A v1.0

Status

30/09/2022 08:46

Product Link Elite (ZNL00277)

Parameter	Value
Product ID	ZNL00277
Machine Serial Number	
Equipment ID	ZNL00277
ECM Part Number	4590786-04
ECM Serial Number	2081F520TR
Software Group Part Number	5754275-00
Software Group Release Date	Mar2019
Software Group Description	VIMS_TELEMATICS_2019_03_06
Application Software Part Number	5672205-00
Cellular Device ECM Serial Number	NA
Cellular Device ECM Hardware Part Number	NA
Cellular Radio Module Software Part Number	NA
Satellite Device ECM Serial Number	NA
Satellite Device ECM Hardware Part Number	NA
Satellite Radio Module Software Part Number	NA
Wi-Fi Radio Hardware Serial Number	NA
Wi-Fi Radio Hardware Part Number	NA
Wi-Fi Radio Software Part Number	NA

3516E Genset - ECM 1 Master ECM (ZNL00277)

Parameter	Value
Equipment ID	
Engine Serial Number	ZNL00277
ECM Serial Number	31416109VW
Software Group Part Number	6081399-00
Software Group Release Date	FEB21
Software Group Description	EP-MEUIC_50Hz_PROD_10.2

3516E Genset - ECM 2 Slave ECM (ZNL00277)

Parameter	Value
Engine Serial Number	ZNL00277
ECM Serial Number	31416063VW
Software Group Part Number	6081399-00
Software Group Release Date	FEB21
Software Group Description	EP-MEUIC_50Hz_PROD_10.2

Digital Voltage Regulator

Parameter	Value
ECM Part Number	3147755-00
ECM Serial Number	22116047GD
Software Group Part Number	3184763-01
Software Group Release Date	NOV2007
Software Group Description	Regulator Software

EMCP 4.4 (CAT00000)

Parameter	Value
ECM Part Number	5034417-00
ECM Serial Number	2631E032TV
Software Group Part Number	6053891-00
Software Group Release Date	NOV2020
Software Group Description	EMCP 4.4 English, v4.11H PROD, 11 November 2020

Digital Pyrometer #1

Parameter	Value
ECM Part Number	3434631-04
ECM Serial Number	2961D024CL
Software Group Part Number	4559451-00
Software Group Release Date	MAR2014
Software Group Description	exhgaspyro

Description	Value	Unit	Min	Max	ECM
TEMP & PRESSION					
Engine Speed	1501	rpm	1499	1501	3516E Genset - ECM 1 Master ECM (ZNL00277)
Engine Coolant Temperature	83	Deg C	74	83	3516E Genset - ECM 1 Master ECM (ZNL00277)
Air Inlet Temperature	11,0	Deg C	11,0	11,6	3516E Genset - ECM 1 Master ECM (ZNL00277)
Intake Manifold Air Temperature	23,2	Deg C	18,3	23,2	3516E Genset - ECM 1 Master ECM (ZNL00277)
Fuel Temperature	14	Deg C	14	14	3516E Genset - ECM 1 Master ECM (ZNL00277)
Engine Oil Temperature	87	Deg C	68	87	3516E Genset - ECM 1 Master ECM (ZNL00277)

Engine Turbocharger #1 Turbine Intake Temperature	619,3	Deg C	609,3	621,6	3516E Genset - ECM 1 Master ECM (ZNL00277)
Engine Turbocharger #2 Turbine Intake Temperature	601,7	Deg C	587,1	604,3	3516E Genset - ECM 1 Master ECM (ZNL00277)
Boost Pressure	42	kPa	31	43	3516E Genset - ECM 1 Master ECM (ZNL00277)
Engine Oil Pressure	635	kPa	633	697	3516E Genset - ECM 1 Master ECM (ZNL00277)
Fuel Pressure	768	kPa	766	775	3516E Genset - ECM 1 Master ECM (ZNL00277)
Barometric Pressure	100,0	kPa	100,0	100,0	3516E Genset - ECM 1 Master ECM (ZNL00277)
Crankcase Pressure	0,1	kPa	0,0	0,1	3516E Genset - ECM 1 Master ECM (ZNL00277)
Fuel Consumption Rate	221,6	L/h	213,3	229,0	3516E Genset - ECM 1 Master ECM (ZNL00277)
Engine Load Factor	26	%	25	27	3516E Genset - ECM 1 Master ECM (ZNL00277)
Engine Power Derate	0	%	0	0	3516E Genset - ECM 1 Master ECM (ZNL00277)
Battery Voltage	27,5	Volts	26,5	27,5	3516E Genset - ECM 1 Master ECM (ZNL00277)
Engine Oil Filter Differential Pressure	31,5	kPa	29,5	31,5	EMCP 4.4 (CAT00000)
Air Filter #1 Restriction	0,3	kPa	0,3	0,4	3516E Genset - ECM 1 Master ECM (ZNL00277)
Air Filter #2 Restriction	0,4	kPa	0,3	0,5	3516E Genset - ECM 1 Master ECM (ZNL00277)

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Product Link Elite (ZNL00277)

Parameter	Value
Product ID	ZNL00277
Machine Serial Number	
Equipment ID	ZNL00277
ECM Part Number	4590786-04
ECM Serial Number	2081F520TR
Software Group Part Number	5754275-00
Software Group Release Date	Mar2019
Software Group Description	VIMS_TELEMATICS_2019_03_06
Application Software Part Number	5672205-00
Cellular Device ECM Serial Number	NA
Cellular Device ECM Hardware Part Number	NA
Cellular Radio Module Software Part Number	NA
Satellite Device ECM Serial Number	NA
Satellite Device ECM Hardware Part Number	NA
Satellite Radio Module Software Part Number	NA
Wi-Fi Radio Hardware Serial Number	NA
Wi-Fi Radio Hardware Part Number	NA
Wi-Fi Radio Software Part Number	NA

3516E Genset - ECM 1 Master ECM (ZNL00277)

Parameter	Value
Equipment ID	
Engine Serial Number	ZNL00277
ECM Serial Number	31416109VW
Software Group Part Number	6081399-00
Software Group Release Date	FEB21
Software Group Description	EP-MEUIC_50Hz_PROD_10.2

3516E Genset - ECM 2 Slave ECM (ZNL00277)

Parameter	Value
Engine Serial Number	ZNL00277
ECM Serial Number	31416063VW
Software Group Part Number	6081399-00
Software Group Release Date	FEB21
Software Group Description	EP-MEUIC_50Hz_PROD_10.2

Digital Voltage Regulator

Parameter	Value
ECM Part Number	3147755-00
ECM Serial Number	22116047GD
Software Group Part Number	3184763-01
Software Group Release Date	NOV2007
Software Group Description	Regulator Software

EMCP 4.4 (CAT00000)

Parameter	Value
ECM Part Number	5034417-00
ECM Serial Number	2631E032TV
Software Group Part Number	6053891-00
Software Group Release Date	NOV2020
Software Group Description	EMCP 4.4 English, v4.11H PROD, 11 November 2020

Digital Pyrometer #1

Parameter	Value
ECM Part Number	3434631-04
ECM Serial Number	2961D024CL
Software Group Part Number	4559451-00
Software Group Release Date	MAR2014
Software Group Description	exhgaspyro

Description	Value	Unit	Min	Max	ECM
EMCP4.4					
Engine Speed	1500	rpm	1499	1501	EMCP 4.4 (CAT00000)
Generator AC Frequency	50,0	Hz	50,0	50,0	EMCP 4.4 (CAT00000)
Generator Phase A RMS Voltage	231	Volts	231	232	EMCP 4.4 (CAT00000)
Generator Phase B RMS Voltage	231	Volts	231	231	EMCP 4.4 (CAT00000)
Generator Phase C RMS Voltage	230	Volts	230	231	EMCP 4.4 (CAT00000)
Generator Phase AB Line-Line AC RMS Voltage	401	Volts	400	401	EMCP 4.4 (CAT00000)
Generator Phase BC Line-Line AC RMS Voltage	399	Volts	399	400	EMCP 4.4 (CAT00000)

Generator Phase CA Line-Line AC RMS Voltage	400	Volts	399	400	EMCP 4.4 (CAT00000)
Generator Phase A RMS Current	1888	Amps	1886	1892	EMCP 4.4 (CAT00000)
Generator Phase B RMS Current	1897	Amps	1894	1899	EMCP 4.4 (CAT00000)
Generator Phase C RMS Current	1905	Amps	1903	1908	EMCP 4.4 (CAT00000)
Generator Total Real Power	1313	kW	1309	1317	EMCP 4.4 (CAT00000)
Generator Overall Power Factor	1,00		1,00	1,00	EMCP 4.4 (CAT00000)
Generator Total Apparent Power	1313	kVA	1310	1317	EMCP 4.4 (CAT00000)
Generator Total Reactive Power	38	kVAr	38	38	EMCP 4.4 (CAT00000)
Generator Excitation Field Current	1,60	Amps	1,50	1,60	Digital Voltage Regulator
Generator Excitation Field Voltage	16,45	Volts	12,05	22,15	Digital Voltage Regulator

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Product Link Elite (ZNL00277)

Parameter	Value
Product ID	ZNL00277
Machine Serial Number	
Equipment ID	ZNL00277
ECM Part Number	4590786-04
ECM Serial Number	2081F520TR
Software Group Part Number	5754275-00
Software Group Release Date	Mar2019
Software Group Description	VIMS_TELEMATICS_2019_03_06
Application Software Part Number	5672205-00
Cellular Device ECM Serial Number	NA
Cellular Device ECM Hardware Part Number	NA
Cellular Radio Module Software Part Number	NA
Satellite Device ECM Serial Number	NA
Satellite Device ECM Hardware Part Number	NA
Satellite Radio Module Software Part Number	NA
Wi-Fi Radio Hardware Serial Number	NA
Wi-Fi Radio Hardware Part Number	NA
Wi-Fi Radio Software Part Number	NA

3516E Genset - ECM 1 Master ECM (ZNL00277)

Parameter	Value
Equipment ID	
Engine Serial Number	ZNL00277
ECM Serial Number	31416109VW
Software Group Part Number	6081399-00
Software Group Release Date	FEB21
Software Group Description	EP-MEUIC_50Hz_PROD_10.2

3516E Genset - ECM 2 Slave ECM (ZNL00277)

Parameter	Value
Engine Serial Number	ZNL00277
ECM Serial Number	31416063VW
Software Group Part Number	6081399-00
Software Group Release Date	FEB21
Software Group Description	EP-MEUIC_50Hz_PROD_10.2

Digital Voltage Regulator

Parameter	Value
ECM Part Number	3147755-00
ECM Serial Number	22116047GD
Software Group Part Number	3184763-01
Software Group Release Date	NOV2007
Software Group Description	Regulator Software

EMCP 4.4 (CAT00000)

Parameter	Value
ECM Part Number	5034417-00
ECM Serial Number	2631E032TV
Software Group Part Number	6053891-00
Software Group Release Date	NOV2020
Software Group Description	EMCP 4.4 English, v4.11H PROD, 11 November 2020

Digital Pyrometer #1

Parameter	Value
ECM Part Number	3434631-04
ECM Serial Number	2961D024CL
Software Group Part Number	4559451-00
Software Group Release Date	MAR2014
Software Group Description	exhgaspyro

Description	Value	Unit	Min	Max	ECM
TEMP & PRESSION					
Engine Speed	1500	rpm	1499	1513	3516E Genset - ECM 1 Master ECM (ZNL00277)
Engine Coolant Temperature	83	Deg C	82	83	3516E Genset - ECM 1 Master ECM (ZNL00277)
Air Inlet Temperature	12,3	Deg C	10,9	12,3	3516E Genset - ECM 1 Master ECM (ZNL00277)
Intake Manifold Air Temperature	25,6	Deg C	23,4	25,7	3516E Genset - ECM 1 Master ECM (ZNL00277)
Fuel Temperature	15	Deg C	14	15	3516E Genset - ECM 1 Master ECM (ZNL00277)
Engine Oil Temperature	89	Deg C	87	89	3516E Genset - ECM 1 Master ECM (ZNL00277)

Engine Turbocharger #1 Turbine Intake Temperature	672,6	Deg C	607,6	715,1	3516E Genset - ECM 1 Master ECM (ZNL00277)
Engine Turbocharger #2 Turbine Intake Temperature	646,2	Deg C	595,4	709,4	3516E Genset - ECM 1 Master ECM (ZNL00277)
Boost Pressure	120	kPa	117	179	3516E Genset - ECM 1 Master ECM (ZNL00277)
Engine Oil Pressure	612	kPa	611	621	3516E Genset - ECM 1 Master ECM (ZNL00277)
Fuel Pressure	743	kPa	736	747	3516E Genset - ECM 1 Master ECM (ZNL00277)
Barometric Pressure	100,0	kPa	100,0	100,0	3516E Genset - ECM 1 Master ECM (ZNL00277)
Crankcase Pressure	0,2	kPa	0,1	0,2	3516E Genset - ECM 1 Master ECM (ZNL00277)
Fuel Consumption Rate	329,6	L/h	306,4	408,2	3516E Genset - ECM 1 Master ECM (ZNL00277)
Engine Load Factor	45	%	36	54	3516E Genset - ECM 1 Master ECM (ZNL00277)
Engine Power Derate	0	%	0	0	3516E Genset - ECM 1 Master ECM (ZNL00277)
Battery Voltage	27,5	Volts	27,0	27,5	3516E Genset - ECM 1 Master ECM (ZNL00277)
Engine Oil Filter Differential Pressure	32,5	kPa	32,0	33,0	EMCP 4.4 (CAT00000)
Air Filter #1 Restriction	0,8	kPa	0,8	1,4	3516E Genset - ECM 1 Master ECM (ZNL00277)
Air Filter #2 Restriction	1,2	kPa	1,0	1,8	3516E Genset - ECM 1 Master ECM (ZNL00277)

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Product Link Elite (ZNL00277)

Parameter	Value
Product ID	ZNL00277
Machine Serial Number	
Equipment ID	ZNL00277
ECM Part Number	4590786-04
ECM Serial Number	2081F520TR
Software Group Part Number	5754275-00
Software Group Release Date	Mar2019
Software Group Description	VIMS_TELEMATICS_2019_03_06
Application Software Part Number	5672205-00
Cellular Device ECM Serial Number	NA
Cellular Device ECM Hardware Part Number	NA
Cellular Radio Module Software Part Number	NA
Satellite Device ECM Serial Number	NA
Satellite Device ECM Hardware Part Number	NA
Satellite Radio Module Software Part Number	NA
Wi-Fi Radio Hardware Serial Number	NA
Wi-Fi Radio Hardware Part Number	NA
Wi-Fi Radio Software Part Number	NA

3516E Genset - ECM 1 Master ECM (ZNL00277)

Parameter	Value
Equipment ID	
Engine Serial Number	ZNL00277
ECM Serial Number	31416109VW
Software Group Part Number	6081399-00
Software Group Release Date	FEB21
Software Group Description	EP-MEUIC_50Hz_PROD_10.2

3516E Genset - ECM 2 Slave ECM (ZNL00277)

Parameter	Value
Engine Serial Number	ZNL00277
ECM Serial Number	31416063VW
Software Group Part Number	6081399-00
Software Group Release Date	FEB21
Software Group Description	EP-MEUIC_50Hz_PROD_10.2

Digital Voltage Regulator

Parameter	Value
ECM Part Number	3147755-00
ECM Serial Number	22116047GD
Software Group Part Number	3184763-01
Software Group Release Date	NOV2007
Software Group Description	Regulator Software

EMCP 4.4 (CAT00000)

Parameter	Value
ECM Part Number	5034417-00
ECM Serial Number	2631E032TV
Software Group Part Number	6053891-00
Software Group Release Date	NOV2020
Software Group Description	EMCP 4.4 English, v4.11H PROD, 11 November 2020

Digital Pyrometer #1

Parameter	Value
ECM Part Number	3434631-04
ECM Serial Number	2961D024CL
Software Group Part Number	4559451-00
Software Group Release Date	MAR2014
Software Group Description	exhgaspyro

Description	Value	Unit	Min	Max	ECM
EMCP4.4					
Engine Speed	1501	rpm	1498	1501	EMCP 4.4 (CAT00000)
Generator AC Frequency	50,0	Hz	50,0	50,0	EMCP 4.4 (CAT00000)
Generator Phase A RMS Voltage	231	Volts	231	231	EMCP 4.4 (CAT00000)
Generator Phase B RMS Voltage	231	Volts	230	231	EMCP 4.4 (CAT00000)
Generator Phase C RMS Voltage	230	Volts	230	231	EMCP 4.4 (CAT00000)
Generator Phase AB Line-Line AC RMS Voltage	401	Volts	400	401	EMCP 4.4 (CAT00000)
Generator Phase BC Line-Line AC RMS Voltage	400	Volts	398	400	EMCP 4.4 (CAT00000)

Generator Phase CA Line-Line AC RMS Voltage	400	Volts	399	400	EMCP 4.4 (CAT00000)
Generator Phase A RMS Current	2974	Amps	2970	2978	EMCP 4.4 (CAT00000)
Generator Phase B RMS Current	2994	Amps	2984	2994	EMCP 4.4 (CAT00000)
Generator Phase C RMS Current	3011	Amps	3005	3014	EMCP 4.4 (CAT00000)
Generator Total Real Power	2072	kW	2062	2076	EMCP 4.4 (CAT00000)
Generator Overall Power Factor	1,00		1,00	1,00	EMCP 4.4 (CAT00000)
Generator Total Apparent Power	2074	kVA	2063	2076	EMCP 4.4 (CAT00000)
Generator Total Reactive Power	82	kVAr	82	83	EMCP 4.4 (CAT00000)
Generator Excitation Field Current	2,05	Amps	2,00	2,15	Digital Voltage Regulator
Generator Excitation Field Voltage	21,75	Volts	17,30	27,30	Digital Voltage Regulator

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Product Link Elite (ZNL00277)

Parameter	Value
Product ID	ZNL00277
Machine Serial Number	
Equipment ID	ZNL00277
ECM Part Number	4590786-04
ECM Serial Number	2081F520TR
Software Group Part Number	5754275-00
Software Group Release Date	Mar2019
Software Group Description	VIMS_TELEMATICS_2019_03_06
Application Software Part Number	5672205-00
Cellular Device ECM Serial Number	NA
Cellular Device ECM Hardware Part Number	NA
Cellular Radio Module Software Part Number	NA
Satellite Device ECM Serial Number	NA
Satellite Device ECM Hardware Part Number	NA
Satellite Radio Module Software Part Number	NA
Wi-Fi Radio Hardware Serial Number	NA
Wi-Fi Radio Hardware Part Number	NA
Wi-Fi Radio Software Part Number	NA

3516E Genset - ECM 1 Master ECM (ZNL00277)

Parameter	Value
Equipment ID	
Engine Serial Number	ZNL00277
ECM Serial Number	31416109VW
Software Group Part Number	6081399-00
Software Group Release Date	FEB21
Software Group Description	EP-MEUIC_50Hz_PROD_10.2

3516E Genset - ECM 2 Slave ECM (ZNL00277)

Parameter	Value
Engine Serial Number	ZNL00277
ECM Serial Number	31416063VW
Software Group Part Number	6081399-00
Software Group Release Date	FEB21
Software Group Description	EP-MEUIC_50Hz_PROD_10.2

Digital Voltage Regulator

Parameter	Value
ECM Part Number	3147755-00
ECM Serial Number	22116047GD
Software Group Part Number	3184763-01
Software Group Release Date	NOV2007
Software Group Description	Regulator Software

EMCP 4.4 (CAT00000)

Parameter	Value
ECM Part Number	5034417-00
ECM Serial Number	2631E032TV
Software Group Part Number	6053891-00
Software Group Release Date	NOV2020
Software Group Description	EMCP 4.4 English, v4.11H PROD, 11 November 2020

Digital Pyrometer #1

Parameter	Value
ECM Part Number	3434631-04
ECM Serial Number	2961D024CL
Software Group Part Number	4559451-00
Software Group Release Date	MAR2014
Software Group Description	exhgaspyro

Description	Value	Unit	Min	Max	ECM
TEMP & PRESSION					
Engine Speed	1502	rpm	1498	1502	3516E Genset - ECM 1 Master ECM (ZNL00277)
Engine Coolant Temperature	84	Deg C	84	84	3516E Genset - ECM 1 Master ECM (ZNL00277)
Air Inlet Temperature	16,0	Deg C	15,2	16,0	3516E Genset - ECM 1 Master ECM (ZNL00277)
Intake Manifold Air Temperature	30,3	Deg C	30,0	30,3	3516E Genset - ECM 1 Master ECM (ZNL00277)
Fuel Temperature	15	Deg C	15	15	3516E Genset - ECM 1 Master ECM (ZNL00277)
Engine Oil Temperature	91	Deg C	91	91	3516E Genset - ECM 1 Master ECM (ZNL00277)

Engine Turbocharger #1 Turbine Intake Temperature	627,2	Deg C	625,2	627,8	3516E Genset - ECM 1 Master ECM (ZNL00277)
Engine Turbocharger #2 Turbine Intake Temperature	615,5	Deg C	613,5	616,4	3516E Genset - ECM 1 Master ECM (ZNL00277)
Boost Pressure	282	kPa	278	284	3516E Genset - ECM 1 Master ECM (ZNL00277)
Engine Oil Pressure	600	kPa	598	603	3516E Genset - ECM 1 Master ECM (ZNL00277)
Fuel Pressure	708	kPa	707	710	3516E Genset - ECM 1 Master ECM (ZNL00277)
Barometric Pressure	100,0	kPa	100,0	100,0	3516E Genset - ECM 1 Master ECM (ZNL00277)
Crankcase Pressure	0,4	kPa	0,3	0,4	3516E Genset - ECM 1 Master ECM (ZNL00277)
Fuel Consumption Rate	575,6	L/h	568,5	587,6	3516E Genset - ECM 1 Master ECM (ZNL00277)
Engine Load Factor	74	%	73	75	3516E Genset - ECM 1 Master ECM (ZNL00277)
Engine Power Derate	0	%	0	0	3516E Genset - ECM 1 Master ECM (ZNL00277)
Battery Voltage	27,0	Volts	27,0	27,5	3516E Genset - ECM 1 Master ECM (ZNL00277)
Engine Oil Filter Differential Pressure	34,5	kPa	34,0	35,0	EMCP 4.4 (CAT00000)
Air Filter #1 Restriction	2,4	kPa	2,2	2,4	3516E Genset - ECM 1 Master ECM (ZNL00277)
Air Filter #2 Restriction	2,9	kPa	2,8	3,0	3516E Genset - ECM 1 Master ECM (ZNL00277)

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Product Link Elite (ZNL00277)

Parameter	Value
Product ID	ZNL00277
Machine Serial Number	
Equipment ID	ZNL00277
ECM Part Number	4590786-04
ECM Serial Number	2081F520TR
Software Group Part Number	5754275-00
Software Group Release Date	Mar2019
Software Group Description	VIMS_TELEMATICS_2019_03_06
Application Software Part Number	5672205-00
Cellular Device ECM Serial Number	NA
Cellular Device ECM Hardware Part Number	NA
Cellular Radio Module Software Part Number	NA
Satellite Device ECM Serial Number	NA
Satellite Device ECM Hardware Part Number	NA
Satellite Radio Module Software Part Number	NA
Wi-Fi Radio Hardware Serial Number	NA
Wi-Fi Radio Hardware Part Number	NA
Wi-Fi Radio Software Part Number	NA

3516E Genset - ECM 1 Master ECM (ZNL00277)

Parameter	Value
Equipment ID	
Engine Serial Number	ZNL00277
ECM Serial Number	31416109VW
Software Group Part Number	6081399-00
Software Group Release Date	FEB21
Software Group Description	EP-MEUIC_50Hz_PROD_10.2

3516E Genset - ECM 2 Slave ECM (ZNL00277)

Parameter	Value
Engine Serial Number	ZNL00277
ECM Serial Number	31416063VW
Software Group Part Number	6081399-00
Software Group Release Date	FEB21
Software Group Description	EP-MEUIC_50Hz_PROD_10.2

Digital Voltage Regulator

Parameter	Value
ECM Part Number	3147755-00
ECM Serial Number	22116047GD
Software Group Part Number	3184763-01
Software Group Release Date	NOV2007
Software Group Description	Regulator Software

EMCP 4.4 (CAT00000)

Parameter	Value
ECM Part Number	5034417-00
ECM Serial Number	2631E032TV
Software Group Part Number	6053891-00
Software Group Release Date	NOV2020
Software Group Description	EMCP 4.4 English, v4.11H PROD, 11 November 2020

Digital Pyrometer #1

Parameter	Value
ECM Part Number	3434631-04
ECM Serial Number	2961D024CL
Software Group Part Number	4559451-00
Software Group Release Date	MAR2014
Software Group Description	exhgaspyro

Description	Value	Unit	Min	Max	ECM
EMCP4.4					
Engine Speed	1501	rpm	1498	1502	EMCP 4.4 (CAT00000)
Generator AC Frequency	50,0	Hz	50,0	50,1	EMCP 4.4 (CAT00000)
Generator Phase A RMS Voltage	231	Volts	231	231	EMCP 4.4 (CAT00000)
Generator Phase B RMS Voltage	231	Volts	230	231	EMCP 4.4 (CAT00000)
Generator Phase C RMS Voltage	230	Volts	230	231	EMCP 4.4 (CAT00000)
Generator Phase AB Line-Line AC RMS Voltage	401	Volts	400	401	EMCP 4.4 (CAT00000)
Generator Phase BC Line-Line AC RMS Voltage	399	Volts	398	399	EMCP 4.4 (CAT00000)

Generator Phase CA Line-Line AC RMS Voltage	399	Volts	399	400	EMCP 4.4 (CAT00000)
Generator Phase A RMS Current	3779	Amps	3773	3785	EMCP 4.4 (CAT00000)
Generator Phase B RMS Current	3817	Amps	3804	3817	EMCP 4.4 (CAT00000)
Generator Phase C RMS Current	3843	Amps	3837	3848	EMCP 4.4 (CAT00000)
Generator Total Real Power	2638	kW	2620	2643	EMCP 4.4 (CAT00000)
Generator Overall Power Factor	1,00		1,00	1,00	EMCP 4.4 (CAT00000)
Generator Total Apparent Power	2640	kVA	2626	2643	EMCP 4.4 (CAT00000)
Generator Total Reactive Power	125	kVAr	125	126	EMCP 4.4 (CAT00000)
Generator Excitation Field Current	2,55	Amps	2,55	2,70	Digital Voltage Regulator
Generator Excitation Field Voltage	21,80	Volts	21,80	36,25	Digital Voltage Regulator

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Product Link Elite (ZNL00277)

Parameter	Value
Product ID	ZNL00277
Machine Serial Number	
Equipment ID	ZNL00277
ECM Part Number	4590786-04
ECM Serial Number	2081F520TR
Software Group Part Number	5754275-00
Software Group Release Date	Mar2019
Software Group Description	VIMS_TELEMATICS_2019_03_06
Application Software Part Number	5672205-00
Cellular Device ECM Serial Number	NA
Cellular Device ECM Hardware Part Number	NA
Cellular Radio Module Software Part Number	NA
Satellite Device ECM Serial Number	NA
Satellite Device ECM Hardware Part Number	NA
Satellite Radio Module Software Part Number	NA
Wi-Fi Radio Hardware Serial Number	NA
Wi-Fi Radio Hardware Part Number	NA
Wi-Fi Radio Software Part Number	NA

3516E Genset - ECM 1 Master ECM (ZNL00277)

Parameter	Value
Equipment ID	
Engine Serial Number	ZNL00277
ECM Serial Number	31416109VW
Software Group Part Number	6081399-00
Software Group Release Date	FEB21
Software Group Description	EP-MEUIC_50Hz_PROD_10.2

3516E Genset - ECM 2 Slave ECM (ZNL00277)

Parameter	Value
Engine Serial Number	ZNL00277
ECM Serial Number	31416063VW
Software Group Part Number	6081399-00
Software Group Release Date	FEB21
Software Group Description	EP-MEUIC_50Hz_PROD_10.2

Digital Voltage Regulator

Parameter	Value
ECM Part Number	3147755-00
ECM Serial Number	22116047GD
Software Group Part Number	3184763-01
Software Group Release Date	NOV2007
Software Group Description	Regulator Software

EMCP 4.4 (CAT00000)

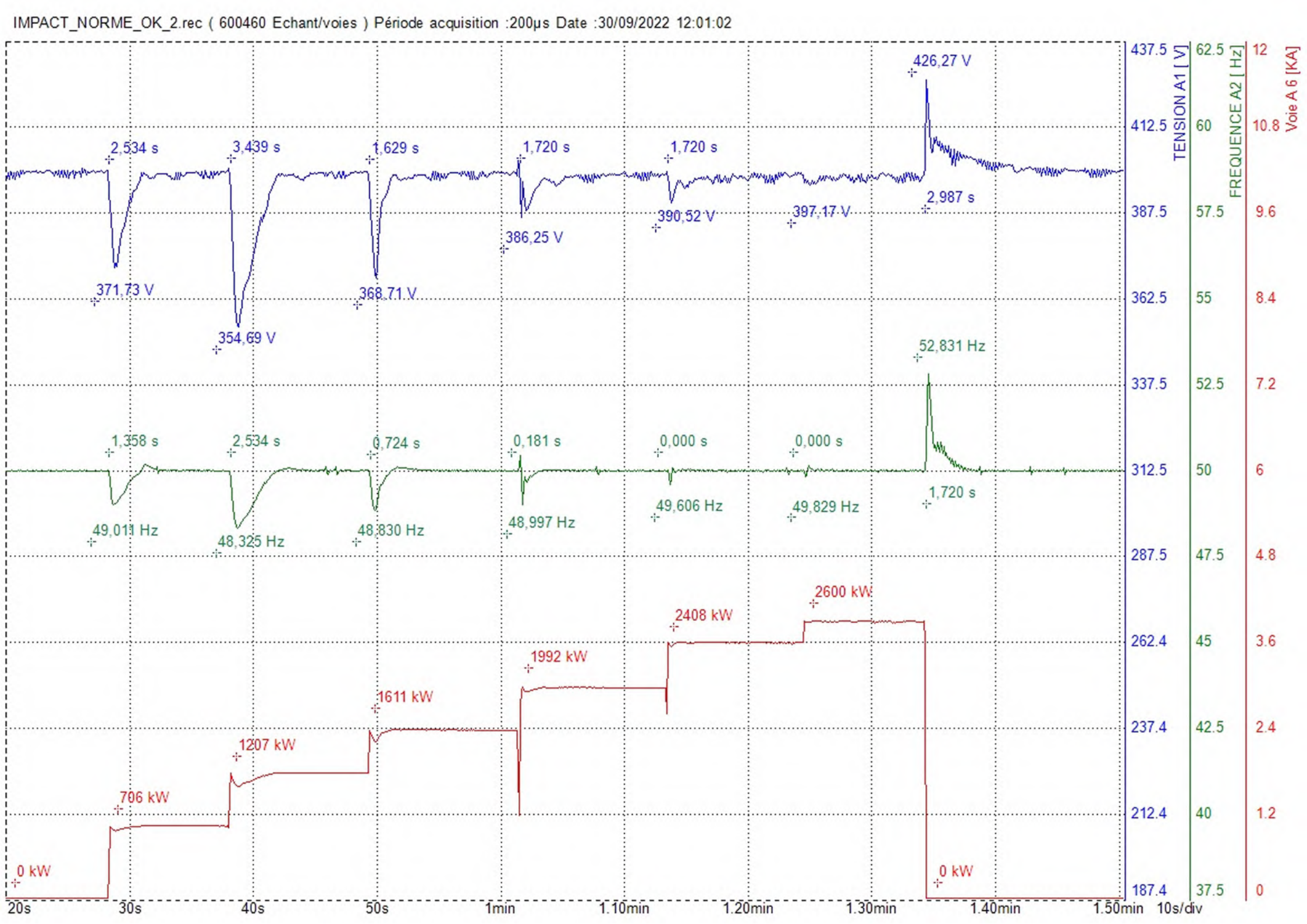
Parameter	Value
ECM Part Number	5034417-00
ECM Serial Number	2631E032TV
Software Group Part Number	6053891-00
Software Group Release Date	NOV2020
Software Group Description	EMCP 4.4 English, v4.11H PROD, 11 November 2020

Digital Pyrometer #1

Parameter	Value
ECM Part Number	3434631-04
ECM Serial Number	2961D024CL
Software Group Part Number	4559451-00
Software Group Release Date	MAR2014
Software Group Description	exhgaspyro

Description	Value	Unit	Min	Max	ECM
TEMP & PRESSION					
Engine Speed	1501	rpm	1497	1503	3516E Genset - ECM 1 Master ECM (ZNL00277)
Engine Coolant Temperature	87	Deg C	85	88	3516E Genset - ECM 1 Master ECM (ZNL00277)
Air Inlet Temperature	21,6	Deg C	16,2	22,2	3516E Genset - ECM 1 Master ECM (ZNL00277)
Intake Manifold Air Temperature	40,0	Deg C	32,4	40,4	3516E Genset - ECM 1 Master ECM (ZNL00277)
Fuel Temperature	18	Deg C	15	18	3516E Genset - ECM 1 Master ECM (ZNL00277)
Engine Oil Temperature	95	Deg C	92	96	3516E Genset - ECM 1 Master ECM (ZNL00277)

Engine Turbocharger #1 Turbine Intake Temperature	668,5	Deg C	654,6	670,2	3516E Genset - ECM 1 Master ECM (ZNL00277)
Engine Turbocharger #2 Turbine Intake Temperature	652,3	Deg C	639,2	654,2	3516E Genset - ECM 1 Master ECM (ZNL00277)
Boost Pressure	337	kPa	335	343	3516E Genset - ECM 1 Master ECM (ZNL00277)
Engine Oil Pressure	581	kPa	579	593	3516E Genset - ECM 1 Master ECM (ZNL00277)
Fuel Pressure	686	kPa	682	1920	3516E Genset - ECM 1 Master ECM (ZNL00277)
Barometric Pressure	100,0	kPa	100,0	100,0	3516E Genset - ECM 1 Master ECM (ZNL00277)
Crankcase Pressure	0,3	kPa	0,3	0,4	3516E Genset - ECM 1 Master ECM (ZNL00277)
Fuel Consumption Rate	694,0	L/h	683,8	710,8	3516E Genset - ECM 1 Master ECM (ZNL00277)
Engine Load Factor	91	%	89	92	3516E Genset - ECM 1 Master ECM (ZNL00277)
Engine Power Derate	0	%	0	0	3516E Genset - ECM 1 Master ECM (ZNL00277)
Battery Voltage	26,5	Volts	26,0	27,5	3516E Genset - ECM 1 Master ECM (ZNL00277)
Engine Oil Filter Differential Pressure	36,0	kPa	35,5	36,5	EMCP 4.4 (CAT00000)
Air Filter #1 Restriction	2,9	kPa	2,8	3,0	3516E Genset - ECM 1 Master ECM (ZNL00277)
Air Filter #2 Restriction	3,6	kPa	3,4	3,7	3516E Genset - ECM 1 Master ECM (ZNL00277)


IMPACT_NORME_OK_2.rec (600460 Echant/voies) Période acquisition :200µs Date :30/09/2022 12:01:02
TENSION A1 [V]
FREQUENCE A2 [Hz]
Voie A 6 [KA]
437.5
412.5
387.5
362.5
337.5
312.5
287.5
262.4
237.4
212.4
187.4
62.5
60
57.5
55
52.5
50
47.5
45
42.5
40
37.5
12
10.8
9.6
8.4
7.2
6
4.8
3.6
2.4
1.2
0
2,534 s
3,439 s
1,629 s
1,720 s
1,720 s
426,27 V
2,987 s
371,73 V
354,69 V
368,71 V
386,25 V
390,52 V
397,17 V
52,831 Hz
1,358 s
2,534 s
0,724 s
0,181 s
0,000 s
0,000 s
1,720 s
49,011 Hz
48,325 Hz
48,830 Hz
48,997 Hz
49,606 Hz
49,829 Hz
2600 kW
2408 kW
1992 kW
1611 kW
1207 kW
706 kW
0 kW
0 kW
20s
30s
40s
50s
1min
1.10min
1.20min
1.30min
1.40min
1.50min
10s/div

Proprietà

DATA 4 ITALY

Progetto

DC 07
MILAN

Supervisore delegato del committente	**GIS.IMO S.r.l.** centro direzionale quattrotorri 06132 PERUGIA	Tél. : +39 075 517 29 83 Fax : +39 075 518 12 88
Assistente del committente	**GARRETTI ASSOCIATI S.r.l.** via Trieste, 9 - 20146 MILANO www.garrettiassociati.it	Tél. : +39 02 430 6931 Fax : +39 02 480 170 51
Progetto architettonico	**GARRETTI ASSOCIATI S.r.l.** via Trieste, 9 - 20146 MILANO www.garrettiassociati.it	Tél. : +39 02 430 6931 Fax : +39 02 480 170 51
Opere edili e prefabbricati	**GENERALE PREFABBRICATI S.p.a** centro direzionale quattrotorri 06132 PERUGIA www.generaleprefabbricatispa.com	Tél. : +39 075 517 29 83 Fax : +39 075 518 12 88
Impianti meccanici	**OMEGA CONCEPT IMPIANTI E SISTEMI S.p.a.** Via Chiese, 72 - 20126 - MILANO www.engie-axima.fr	Tél. : +39 02 8180951 Fax : +39 02 8135163
impianti elettrici/dati	**ENGIE CONTRACTING ITALIA S.r.l.** Via Chiese, 72 - 20126 - MILANO www.engie.com	Tél. : +39 02 94399262 Fax : +39 02 94399655
	SCHNEIDER ELECTRIC S.p.A. Via Circonvallazione Est, 1 - 24040 STEZZANO (BG) www.schneider-electric.com	Tél. : +39 0354151111 Fax : +39 0354153200
	ENERIA Rue de Longpont - BP 10202 - 91311 MONTLHERY Cedex - FRANCE www.eneria.fr	Tél. : +33 (0) 169802100 Fax : +33 (0) 169802150
Progettazione antincendio	**STUDIO TECNICO ZACCARELLI S.r.l.** via Ludovico il Moro, 17 - 20143 MILANO www.studiozaccarelli.it	Tél. : +39 02 891 200 81 Fax : +39 02 813 962 8
Supervisione	**ITALSOCOTEC S.p.a.** Via Pontaccio,12/A- 20121 Milano italsocotec@italsocotec.it	Tél. : +39 02 89051500 Fax : +39 02 89051501

Cod	Data	Descrizione
	23/09/2022	

DATA 4 ITALY - DC07 Milan
Commissioning Level 1 - Grey tag
FAT GEE

PARAMETERS

IDENTIFICATION	
Customer	DATA IV
Project	DC07 MILAN - GEE
Date	28/07/2022
Eneria Department	BU DATA CENTER
Genset type	COMPACT
Genset S/N	CAT3516EVZNL00293
Power	3250 KVA
Rating	STANDBY
Eneria OT number	380306

ENGINE	MANUFACTURER :	
Type :	Theoretical Plate	Final Plate
Serial Number	ZNL00279	
AR Number	5930146	
Altitude max	2953 m	
Rack travel	10 FLS / 0 FTS	
Power : HP / KW	3032 KW	
No-load Speed	1515	
On-load Speed	1500	
Setting	N/A	

ENGINE REGULATION	
Manufacturer	CAT/ADEM5
Model	ELECTRONIQUE/EUI
Actuator Number	ECM
Serial Number	31416065VW
Regulator Number	CAN
Serial Number	N/A
Spring Number	N/A

TURBOCHARGER	
Aftercooler	CAT
Number of turbos	4
Turbos manufacturer	CAT
Serial Number	555-0590 X4

INJECTION	PUMP INJECTOR
Injector Number	5816969

ENGINE CONTROL PANEL
EMCP4.4
GENERATOR
VOLTAGE / CURRENT/ FREQUENCY
KW / KVA / KVAr / P.f.
TOTAL KW% / KVA% / KVAr%
KWh / KVArh
EXCITATION FIELD VOLTAGE / CURRENT
ENGINE :
OIL PRESSURE / COOLANT TEMPERATURE
ENGINE SPEED / BATTERY VOLTAGE
TOTAL LAUNCH / TOTAL START
TEMPERATURE ECHAPPEMENT G-D
FUEL PRESSURE / OIL PRESSURE
BOOST PRESSURE / OIL TEMPERATURE
OIL, FUEL, AIR FILTER CLOGGING
FUEL CONSUMPTION RATE

RADIATOR	
Manufacturer	N/A
Part Number	N/A
Reference	N/A
Serial Number	N/A
Power	N/A
Pulley Wheel Ratio	N/A
Belt Number	N/A

AIR-COOLER	
Manufacturer	N/A
Fan	N/A
Blades diameter	N/A
Power	N/A
Electrical Motor	N/A

AIR COOLER TEST BANCH

STARTING					
Electrical starter	Manufac.	CAT X2 349-6606	Type	24V/CW
Air starter	Manufac.	CAT X1 349-6606	Type	24V/CW
Alternator	Manufac.	CAT X1 561-2986	Volts/Amps	24V/50A

WATER HEATER			Pump		Thermostat	
Manufacturer	ENERIA					
Power	9kW	Manufac.	WILO	Manufacturer	DANFOSS
Voltage	400V	Voltage	230V	Setting	60°C

DRAWINGS	
Engine CAT N°	491-3960-03
Genset CAT N°	552-6069-01
Genset Eneria N°	E-7021-1
Genset Eneria N°	
Switchgear Eneria N	N/A
Other Eneria N°	N/A

LIQUIDS	
Fuel LHV	10150KG cal/Kg
Fuel Density	0.88 Kg/L
Coolant	TEST BENCH
Lube oil	ORIGIN

GENERATOR	MANUFACTURER :	CATERPILLAR
Type :	Theoretical Plate	Final Plate
Serial Number	4Y702036	
AR Number	585-1976	
Frame Number	N/A	
Power kVA / kW	3250 / 2600	
Duty cycle	STANDBY	
Frequency	50HZ	
Temperature Max	N/A	
Efficiency	N/A	
Regulator type	CDVR	
Reference	314-7755	
Serial Number	28116009GD	
Excitation type	PERMANENT MAGNETS	

PARAMETERS

IDENTIFICATION	
Customer	DATA IV
Project	DC07 MILAN - GEE
Date	28 juillet 2022

TEST	
Test Date	28/07/2022
Test Supervisor	B004386

DISPLAY	Gauge
Voltmeter	0-400V
Frequencymeter	0-99HZ
Ammeter	0-5000A
Current transfo.	5000/5A
Wattmeter	0-2000 KW
Current transfo.	5000/5A
Water Temp.	CAT
Lube Oil Pressure	CAT
Lube Oil Temp.	CAT
Speed	CAT
Battery Voltage	CAT
Charge Air Pressure	CAT
Exhaust Temp.	N/A

EQUIPMENTS	
Control Panel	EMCP4.4
Cabinet	N/A
Transfer Switch	N/A
Circuit Breaker	N/A
Coupler	N/A
Ref / Serial N°	N/A
Load Sharing	N/A
Ref / Serial N°	N/A
Power Return	EMCP4.4
Ref	503-4417-00
Protection Board	EMCP4.4
Ref	503-4417-00
Serial N°	2956E580TX

Battery charger	N/A
Ref / Serial N°	N/A
Earth Fault	N/A
Ref	N/A
Speed relay manuf.	EMCP4.4
Ref	503-4417-00
Serial N°	2631E062TV
Starter Stop	400TR/MN
Shut-off Valve	N/A
Injection	CAT
Air	N/A

SETTINGS

DISPLAY	Théoretical Value	Tolerance	Checking
Voltage (V)	400	+/-5%	√
Frequency (Hz)	50	+/-2%	√
Current (I)	3609	+/-1%	√
Power (kVA)	2500	+/-1%	√
Water Temp. (°C)	89	+/-5%	√
LubeOil Pres. (kPa)	376	+/-5%	√
LubeOil Temp (°C)	N/A	+/-5%	/
Speed (tr/min)	1500	+/-5%	√
Battery Voltage (V)	27	+/-5%	√
Charge Air Pres. (kPa)	260	+/-5%	√
Exhaust Temp. (°C)	690	+/-5%	√

SECURITIES	Type	Level	Checking
Low Oil Pressure	SENSOR	205KPA	√
High Water Temp.	SENSOR	107°C	√
Low Oil Level	MURPHY	N/A	/
Low Coolant Level	N/A	N/A	/
High Oil Temp.	N/A	N/A	/
Overspeed	SENSOR	1770Tr/mn	√
Overcranck	CYCLES	5	√
Generator Temp.	N/A	N/A	/
Emergency Stop	PUSH BUTTON	NA	√
Over/Under Voltage	%	110/85	/
Over/Under Freq.	%	110/90	/
Overcurrent	%	105	/
Earth Protection	N/A	N/A	/
Power return	%	10	/
ALARMS			
Low Oil Pressure	SENSOR	239KPA	√
High Water Temp.	SENSOR	102°C	√
High Oil Temp.	N/A	N/A	/
Overspeed	%	105/90	/
Low Fuel Level	%	105/95	/
Low Water Temp.	SENSOR	21°C	√

COMMENTS	VISA / DATE

IDENTIFICATION	
Customer	DATA IV
Project	DC07 MILAN - GEE
Genset S/N	CAT3516EVZNL00293

TEST	
Test Date	28/07/2022
Test Supervisor	B004386

LOAD PERFORMANCE TESTS

TIMER	
Before tests	5,5 Hrs
After tests	7,5 Hrs

TESTS PARAMETERS	
Atmospheric Pres.	753,0 mm Hg
Ambiant Temp.	25,9°C
Charge Air Temp	
Left Air Filter	35,9°C
Right Air Filter	44,2°C

FULL LOAD VALUES			
Oil Dif. Pressure	36,5kPa	Actuator Voltage	
Fuel Dif. Pressure	N/A	No-load	N/A
Air Intake Temp.	45,8°C	Full load	N/A
Pressure Drop		Pick-up Voltage	N/A
Left Air Filter	3,36 kPa		
Right Air Filter	4,0 kPa		

VALUES

Duration (hours)	Power (kW)	Voltage (V)	Current (A)	Frequency (Hz)	Cos Ø	Excitation Voltage (V)	Charge Air Pressure (bars)		Exhaust Temp. (°C)		Oil Pressure (bars or kPa)	Water Temp (°C)	Fuel Pres. (bars or kPa)	Oil Temp. (°C)
							L	R	L	R				
15 mn	650 (25%)	400	944	50	1	14,45	N/A	31	352,4	341,7	629	82	764	88
15 mn	1300 (50%)	400	1887	50	1	14,25	N/A	115	392,2	386,8	610	83	731	89
15 mn	1950 (75%)	400	2827	50	1	29,7	N/A	261	384,5	366	589	83	713	91
60 mn	2600 (100%)	400	3763	50	1	35,7	N/A	331	382,6	369,2	566	86	653	95

COMMENTS	VISA / DATE

Eneria CAT
Moteurs et Groupes électrogènes

Procès Verbal
QUAL FOR 10 / 03

Fournisseur : *Supplier :*	N° du Procès Verbal : *Certificate Number :* 2022-07-005
Usine : *Works :*	Nombre de pages : *Number of sheets :* 36
Client : *Customer :* DATA IV	**PROCES VERBAL DE RECETTE DE CONFORMITE AUX STIPULATIONS D'UNE COMMANDE ETABLI PAR L'INDUSTRIEL FOURNISSEUR** ***CERTIFICATE OF TESTS OF CONFORMITY TO THE STIPULATIONS OF AN ORDER ESTABLISHED BY THE INDUSTRIAL SUPPLIER***
N° de commande : *Order N° :* 811218	
Nom du projet : *Project name :* DC07 MILAN - GEE	

Désignation *Designation*	Référence ou type *Reference or type*	Quantité *Quantity*	N° de série ou lot *Serial or batch N°*	N° de plan Drawing N°
Groupe électrogene	3516E	1	CAT3516EVZNL00293	491-3960-03 552-6069-01 E-7021-1

N° du Procès Verbal :
Certificate Number : 2022-07-005

Nous certifions que, sauf exceptions ou dérogations énumérées ci-après, la fourniture citée ci-dessus a été fabriquée conformément aux spécifications techniques du marché, commande ou sous-commande du client et que, toutes opérations de contrôle et d'essais effectuées, la fourniture répond, SOUS TOUS SES ASPECTS, à la commande, aux spécifications particulières ci-jointes, aux plans, ainsi qu'aux normes et règlements en vigueur s'y rapportant.

We certify that, subject to exceptions or concessions listed hereafter, the supplies detailed hereover were manufactured in accordance with the technical specifications of the contract, order or sub-order, and that all inspection operations and tests having been completed, the supplies comply IN EVERY RESPECT with the order, the relevant particular specifications, drawings and relevant standards and regulations in force.

☐ sans aucune réserve ou non-conformité
without any reservation or non-conformity

☐ avec les réserves ou non-conformités suivantes
with the following reservations or non-conformity

Eneria CAT
Moteurs et Groupes électrogènes

Procès Verbal
QUAL FOR 10 / 03

N° du Procès Verbal :
Certificate Number : 2022-07-005

VISAS - SIGNATURES

CONTRÔLE FOURNISSEUR *SUPPLIER'S INSPECTION*	CONTRÔLE CLIENT *CUSTOMER'S INSPECTION*
Nom et fonction : E. PINTEAUX Ingenieur Projets *Name and function :* Eneria Service Commercial Rue de Longpont - BP 10202 91311 MONTLHÉRY Tél. 01 69 80 22 70 - Fax 01 69 80 21 90 Siret 352 774 079 00029 APE 4669A Date : 28/07/22 Signature :	Nom et fonction : *Name and function :* Date : Signature :

Cat Electronic Technician 2022A v1.0

Status

28/07/2022 08:25

3516E Genset - ECM 2 Slave ECM (ZNL00293)

Parameter	Value
Engine Serial Number	ZNL00293
ECM Serial Number	28418122VW
Software Group Part Number	6081399-00
Software Group Release Date	FEB21
Software Group Description	EP-MEUIC_50Hz_PROD_10.2

Product Link Elite (ZNL00293)

Parameter	Value
Product ID	ZNL00293
Machine Serial Number	
Equipment ID	ZNL00293
ECM Part Number	4590786-04
ECM Serial Number	1581F524TR
Software Group Part Number	5754275-00
Software Group Release Date	Mar2019
Software Group Description	VIMS_TELEMATICS_2019_03_06
Application Software Part Number	5672205-00
Cellular Device ECM Serial Number	NA
Cellular Device ECM Hardware Part Number	NA
Cellular Radio Module Software Part Number	NA
Satellite Device ECM Serial Number	NA
Satellite Device ECM Hardware Part Number	NA
Satellite Radio Module Software Part Number	NA
Wi-Fi Radio Hardware Serial Number	NA
Wi-Fi Radio Hardware Part Number	NA
Wi-Fi Radio Software Part Number	NA

3516E Genset - ECM 1 Master ECM (ZNL00293)

Parameter	Value
Equipment ID	
Engine Serial Number	ZNL00293
ECM Serial Number	28418120VW
Software Group Part Number	6081399-00
Software Group Release Date	FEB21
Software Group Description	EP-MEUIC_50Hz_PROD_10.2

Digital Voltage Regulator

Parameter	Value
ECM Part Number	3147755-00
ECM Serial Number	28116004GD
Software Group Part Number	3184763-01
Software Group Release Date	NOV2007
Software Group Description	Regulator Software

Digital Pyrometer #1

Parameter	Value
ECM Part Number	3434631-04
ECM Serial Number	2921D024CL
Software Group Part Number	4559451-00
Software Group Release Date	MAR2014
Software Group Description	exhgaspyro

EMCP 4.4 (CAT00000)

Parameter	Value
ECM Part Number	5034417-00
ECM Serial Number	2631E155TV
Software Group Part Number	6012310-00
Software Group Release Date	JUN2020
Software Group Description	EMCP 4.4 English, v4.10.5H PROD, 10 June 2020

Description	Value	Unit	Min	Max	ECM
EMCP4.4					
Engine Speed	1500	rpm	1499	1501	EMCP 4.4 (CAT00000)
Generator AC Frequency	50,0	Hz	50,0	50,0	EMCP 4.4 (CAT00000)
Generator Phase A RMS Voltage	231	Volts	231	232	EMCP 4.4 (CAT00000)
Generator Phase B RMS Voltage	231	Volts	230	231	EMCP 4.4 (CAT00000)
Generator Phase C RMS Voltage	230	Volts	230	231	EMCP 4.4 (CAT00000)
Generator Phase AB Line-Line AC RMS Voltage	401	Volts	400	402	EMCP 4.4 (CAT00000)
Generator Phase BC Line-Line AC RMS Voltage	399	Volts	398	399	EMCP 4.4 (CAT00000)

Generator Phase CA Line-Line AC RMS Voltage	399	Volts	399	400	EMCP 4.4 (CAT00000)
Generator Phase A RMS Current	906	Amps	903	907	EMCP 4.4 (CAT00000)
Generator Phase B RMS Current	966	Amps	964	967	EMCP 4.4 (CAT00000)
Generator Phase C RMS Current	959	Amps	958	961	EMCP 4.4 (CAT00000)
Generator Total Real Power	653	kW	650	657	EMCP 4.4 (CAT00000)
Generator Overall Power Factor	1,00		1,00	1,00	EMCP 4.4 (CAT00000)
Generator Total Apparent Power	654	kVA	651	655	EMCP 4.4 (CAT00000)
Generator Total Reactive Power	7	kVAr	7	7	EMCP 4.4 (CAT00000)
Generator Excitation Field Current	1,30	Amps	1,20	1,40	Digital Voltage Regulator
Generator Excitation Field Voltage	14,45	Volts	7,35	22,50	Digital Voltage Regulator

Cat Electronic Technician 2022A v1.0

Status

28/07/2022 08:26

3516E Genset - ECM 2 Slave ECM (ZNL00293)

Parameter	Value
Engine Serial Number	ZNL00293
ECM Serial Number	28418122VW
Software Group Part Number	6081399-00
Software Group Release Date	FEB21
Software Group Description	EP-MEUIC_50Hz_PROD_10.2

Product Link Elite (ZNL00293)

Parameter	Value
Product ID	ZNL00293
Machine Serial Number	
Equipment ID	ZNL00293
ECM Part Number	4590786-04
ECM Serial Number	1581F524TR
Software Group Part Number	5754275-00
Software Group Release Date	Mar2019
Software Group Description	VIMS_TELEMATICS_2019_03_06
Application Software Part Number	5672205-00
Cellular Device ECM Serial Number	NA
Cellular Device ECM Hardware Part Number	NA
Cellular Radio Module Software Part Number	NA
Satellite Device ECM Serial Number	NA
Satellite Device ECM Hardware Part Number	NA
Satellite Radio Module Software Part Number	NA
Wi-Fi Radio Hardware Serial Number	NA
Wi-Fi Radio Hardware Part Number	NA
Wi-Fi Radio Software Part Number	NA

3516E Genset - ECM 1 Master ECM (ZNL00293)

Parameter	Value
Equipment ID	
Engine Serial Number	ZNL00293
ECM Serial Number	28418120VW
Software Group Part Number	6081399-00
Software Group Release Date	FEB21
Software Group Description	EP-MEUIC_50Hz_PROD_10.2

Digital Voltage Regulator

Parameter	Value
ECM Part Number	3147755-00
ECM Serial Number	28116004GD
Software Group Part Number	3184763-01
Software Group Release Date	NOV2007
Software Group Description	Regulator Software

Digital Pyrometer #1

Parameter	Value
ECM Part Number	3434631-04
ECM Serial Number	2921D024CL
Software Group Part Number	4559451-00
Software Group Release Date	MAR2014
Software Group Description	exhgaspyro

EMCP 4.4 (CAT00000)

Parameter	Value
ECM Part Number	5034417-00
ECM Serial Number	2631E155TV
Software Group Part Number	6012310-00
Software Group Release Date	JUN2020
Software Group Description	EMCP 4.4 English, v4.10.5H PROD, 10 June 2020

Description	Value	Unit	Min	Max	ECM
TEMP & PRESSION					
Engine Speed	1501	rpm	1500	1501	3516E Genset - ECM 1 Master ECM (ZNL00293)
Engine Coolant Temperature	82	Deg C	82	82	3516E Genset - ECM 1 Master ECM (ZNL00293)
Air Inlet Temperature	21,4	Deg C	21,4	21,4	3516E Genset - ECM 1 Master ECM (ZNL00293)
Intake Manifold Air Temperature	34,7	Deg C	34,7	34,7	3516E Genset - ECM 1 Master ECM (ZNL00293)
Fuel Temperature	27	Deg C	26	27	3516E Genset - ECM 1 Master ECM (ZNL00293)
Engine Oil Temperature	88	Deg C	87	88	3516E Genset - ECM 1 Master ECM (ZNL00293)

Engine Turbocharger #1 Turbine Intake Temperature	620,6	Deg C	620,5	621,0	3516E Genset - ECM 1 Master ECM (ZNL00293)
Engine Turbocharger #2 Turbine Intake Temperature	608,6	Deg C	608,5	609,0	3516E Genset - ECM 1 Master ECM (ZNL00293)
Boost Pressure	31	kPa	31	32	3516E Genset - ECM 1 Master ECM (ZNL00293)
Engine Oil Pressure	629	kPa	629	631	3516E Genset - ECM 1 Master ECM (ZNL00293)
Fuel Pressure	764	kPa	762	765	3516E Genset - ECM 1 Master ECM (ZNL00293)
Barometric Pressure	100,0	kPa	100,0	100,0	3516E Genset - ECM 1 Master ECM (ZNL00293)
Crankcase Pressure	0,1	kPa	0,0	0,1	3516E Genset - ECM 1 Master ECM (ZNL00293)
Fuel Consumption Rate	208,6	L/h	205,0	213,9	3516E Genset - ECM 1 Master ECM (ZNL00293)
Engine Load Factor	24	%	24	25	3516E Genset - ECM 1 Master ECM (ZNL00293)
Engine Power Derate	0	%	0	0	3516E Genset - ECM 1 Master ECM (ZNL00293)
Battery Voltage	27,5	Volts	27,5	27,5	3516E Genset - ECM 1 Master ECM (ZNL00293)
Engine Oil Filter Differential Pressure	32,5	kPa	32,5	33,0	EMCP 4.4 (CAT00000)
Air Filter #1 Restriction	0,6	kPa	0,5	0,6	3516E Genset - ECM 1 Master ECM (ZNL00293)
Air Filter #2 Restriction	0,6	kPa	0,5	0,6	3516E Genset - ECM 1 Master ECM (ZNL00293)

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3516E Genset - ECM 2 Slave ECM (ZNL00293)

Parameter	Value
Engine Serial Number	ZNL00293
ECM Serial Number	28418122VW
Software Group Part Number	6081399-00
Software Group Release Date	FEB21
Software Group Description	EP-MEUIC_50Hz_PROD_10.2

Product Link Elite (ZNL00293)

Parameter	Value
Product ID	ZNL00293
Machine Serial Number	
Equipment ID	ZNL00293
ECM Part Number	4590786-04
ECM Serial Number	1581F524TR
Software Group Part Number	5754275-00
Software Group Release Date	Mar2019
Software Group Description	VIMS_TELEMATICS_2019_03_06
Application Software Part Number	5672205-00
Cellular Device ECM Serial Number	NA
Cellular Device ECM Hardware Part Number	NA
Cellular Radio Module Software Part Number	NA
Satellite Device ECM Serial Number	NA
Satellite Device ECM Hardware Part Number	NA
Satellite Radio Module Software Part Number	NA
Wi-Fi Radio Hardware Serial Number	NA
Wi-Fi Radio Hardware Part Number	NA
Wi-Fi Radio Software Part Number	NA

3516E Genset - ECM 1 Master ECM (ZNL00293)

Parameter	Value
Equipment ID	
Engine Serial Number	ZNL00293
ECM Serial Number	28418120VW
Software Group Part Number	6081399-00
Software Group Release Date	FEB21
Software Group Description	EP-MEUIC_50Hz_PROD_10.2

Digital Voltage Regulator

Parameter	Value
ECM Part Number	3147755-00
ECM Serial Number	28116004GD
Software Group Part Number	3184763-01
Software Group Release Date	NOV2007
Software Group Description	Regulator Software

Digital Pyrometer #1

Parameter	Value
ECM Part Number	3434631-04
ECM Serial Number	2921D024CL
Software Group Part Number	4559451-00
Software Group Release Date	MAR2014
Software Group Description	exhgaspyro

EMCP 4.4 (CAT00000)

Parameter	Value
ECM Part Number	5034417-00
ECM Serial Number	2631E155TV
Software Group Part Number	6012310-00
Software Group Release Date	JUN2020
Software Group Description	EMCP 4.4 English, v4.10.5H PROD, 10 June 2020

Description	Value	Unit	Min	Max	ECM
EMCP4.4					
Engine Speed	1501	rpm	1498	1501	EMCP 4.4 (CAT00000)
Generator AC Frequency	50,0	Hz	50,0	50,0	EMCP 4.4 (CAT00000)
Generator Phase A RMS Voltage	231	Volts	231	232	EMCP 4.4 (CAT00000)
Generator Phase B RMS Voltage	231	Volts	230	231	EMCP 4.4 (CAT00000)
Generator Phase C RMS Voltage	230	Volts	229	231	EMCP 4.4 (CAT00000)
Generator Phase AB Line-Line AC RMS Voltage	401	Volts	400	402	EMCP 4.4 (CAT00000)
Generator Phase BC Line-Line AC RMS Voltage	399	Volts	397	400	EMCP 4.4 (CAT00000)

Generator Phase CA Line-Line AC RMS Voltage	400	Volts	398	400	EMCP 4.4 (CAT00000)
Generator Phase A RMS Current	1844	Amps	1840	1850	EMCP 4.4 (CAT00000)
Generator Phase B RMS Current	1913	Amps	1908	1918	EMCP 4.4 (CAT00000)
Generator Phase C RMS Current	1905	Amps	1895	1907	EMCP 4.4 (CAT00000)
Generator Total Real Power	1309	kW	1292	1314	EMCP 4.4 (CAT00000)
Generator Overall Power Factor	1,00		1,00	1,00	EMCP 4.4 (CAT00000)
Generator Total Apparent Power	1308	kVA	1299	1312	EMCP 4.4 (CAT00000)
Generator Total Reactive Power	31	kVAr	31	31	EMCP 4.4 (CAT00000)
Generator Excitation Field Current	1,55	Amps	1,45	1,70	Digital Voltage Regulator
Generator Excitation Field Voltage	14,25	Volts	9,75	27,55	Digital Voltage Regulator

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3516E Genset - ECM 2 Slave ECM (ZNL00293)

Parameter	Value
Engine Serial Number	ZNL00293
ECM Serial Number	28418122VW
Software Group Part Number	6081399-00
Software Group Release Date	FEB21
Software Group Description	EP-MEUIC_50Hz_PROD_10.2

Product Link Elite (ZNL00293)

Parameter	Value
Product ID	ZNL00293
Machine Serial Number	
Equipment ID	ZNL00293
ECM Part Number	4590786-04
ECM Serial Number	1581F524TR
Software Group Part Number	5754275-00
Software Group Release Date	Mar2019
Software Group Description	VIMS_TELEMATICS_2019_03_06
Application Software Part Number	5672205-00
Cellular Device ECM Serial Number	NA
Cellular Device ECM Hardware Part Number	NA
Cellular Radio Module Software Part Number	NA
Satellite Device ECM Serial Number	NA
Satellite Device ECM Hardware Part Number	NA
Satellite Radio Module Software Part Number	NA
Wi-Fi Radio Hardware Serial Number	NA
Wi-Fi Radio Hardware Part Number	NA
Wi-Fi Radio Software Part Number	NA

3516E Genset - ECM 1 Master ECM (ZNL00293)

Parameter	Value
Equipment ID	
Engine Serial Number	ZNL00293
ECM Serial Number	28418120VW
Software Group Part Number	6081399-00
Software Group Release Date	FEB21
Software Group Description	EP-MEUIC_50Hz_PROD_10.2

Digital Voltage Regulator

Parameter	Value
ECM Part Number	3147755-00
ECM Serial Number	28116004GD
Software Group Part Number	3184763-01
Software Group Release Date	NOV2007
Software Group Description	Regulator Software

Digital Pyrometer #1

Parameter	Value
ECM Part Number	3434631-04
ECM Serial Number	2921D024CL
Software Group Part Number	4559451-00
Software Group Release Date	MAR2014
Software Group Description	exhgaspyro

EMCP 4.4 (CAT00000)

Parameter	Value
ECM Part Number	5034417-00
ECM Serial Number	2631E155TV
Software Group Part Number	6012310-00
Software Group Release Date	JUN2020
Software Group Description	EMCP 4.4 English, v4.10.5H PROD, 10 June 2020

Description	Value	Unit	Min	Max	ECM
TEMP & PRESSION					
Engine Speed	1500	rpm	1499	1501	3516E Genset - ECM 1 Master ECM (ZNL00293)
Engine Coolant Temperature	83	Deg C	83	83	3516E Genset - ECM 1 Master ECM (ZNL00293)
Air Inlet Temperature	22,7	Deg C	22,7	22,7	3516E Genset - ECM 1 Master ECM (ZNL00293)
Intake Manifold Air Temperature	36,3	Deg C	36,2	36,3	3516E Genset - ECM 1 Master ECM (ZNL00293)
Fuel Temperature	27	Deg C	27	27	3516E Genset - ECM 1 Master ECM (ZNL00293)
Engine Oil Temperature	89	Deg C	89	89	3516E Genset - ECM 1 Master ECM (ZNL00293)

Engine Turbocharger #1 Turbine Intake Temperature	707,3	Deg C	706,5	707,3	3516E Genset - ECM 1 Master ECM (ZNL00293)
Engine Turbocharger #2 Turbine Intake Temperature	682,9	Deg C	682,4	683,2	3516E Genset - ECM 1 Master ECM (ZNL00293)
Boost Pressure	115	kPa	114	116	3516E Genset - ECM 1 Master ECM (ZNL00293)
Engine Oil Pressure	610	kPa	609	611	3516E Genset - ECM 1 Master ECM (ZNL00293)
Fuel Pressure	731	kPa	729	734	3516E Genset - ECM 1 Master ECM (ZNL00293)
Barometric Pressure	100,0	kPa	100,0	100,0	3516E Genset - ECM 1 Master ECM (ZNL00293)
Crankcase Pressure	0,1	kPa	0,1	0,2	3516E Genset - ECM 1 Master ECM (ZNL00293)
Fuel Consumption Rate	338,3	L/h	338,3	346,4	3516E Genset - ECM 1 Master ECM (ZNL00293)
Engine Load Factor	49	%	48	49	3516E Genset - ECM 1 Master ECM (ZNL00293)
Engine Power Derate	0	%	0	0	3516E Genset - ECM 1 Master ECM (ZNL00293)
Battery Voltage	26,5	Volts	26,5	27,0	3516E Genset - ECM 1 Master ECM (ZNL00293)
Engine Oil Filter Differential Pressure	33,5	kPa	33,5	34,0	EMCP 4.4 (CAT00000)
Air Filter #1 Restriction	1,2	kPa	1,1	1,2	3516E Genset - ECM 1 Master ECM (ZNL00293)
Air Filter #2 Restriction	1,3	kPa	1,3	1,4	3516E Genset - ECM 1 Master ECM (ZNL00293)

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3516E Genset - ECM 2 Slave ECM (ZNL00293)

Parameter	Value
Engine Serial Number	ZNL00293
ECM Serial Number	28418122VW
Software Group Part Number	6081399-00
Software Group Release Date	FEB21
Software Group Description	EP-MEUIC_50Hz_PROD_10.2

Product Link Elite (ZNL00293)

Parameter	Value
Product ID	ZNL00293
Machine Serial Number	
Equipment ID	ZNL00293
ECM Part Number	4590786-04
ECM Serial Number	1581F524TR
Software Group Part Number	5754275-00
Software Group Release Date	Mar2019
Software Group Description	VIMS_TELEMATICS_2019_03_06
Application Software Part Number	5672205-00
Cellular Device ECM Serial Number	NA
Cellular Device ECM Hardware Part Number	NA
Cellular Radio Module Software Part Number	NA
Satellite Device ECM Serial Number	NA
Satellite Device ECM Hardware Part Number	NA
Satellite Radio Module Software Part Number	NA
Wi-Fi Radio Hardware Serial Number	NA
Wi-Fi Radio Hardware Part Number	NA
Wi-Fi Radio Software Part Number	NA

3516E Genset - ECM 1 Master ECM (ZNL00293)

Parameter	Value
Equipment ID	
Engine Serial Number	ZNL00293
ECM Serial Number	28418120VW
Software Group Part Number	6081399-00
Software Group Release Date	FEB21
Software Group Description	EP-MEUIC_50Hz_PROD_10.2

Digital Voltage Regulator

Parameter	Value
ECM Part Number	3147755-00
ECM Serial Number	28116004GD
Software Group Part Number	3184763-01
Software Group Release Date	NOV2007
Software Group Description	Regulator Software

Digital Pyrometer #1

Parameter	Value
ECM Part Number	3434631-04
ECM Serial Number	2921D024CL
Software Group Part Number	4559451-00
Software Group Release Date	MAR2014
Software Group Description	exhgaspyro

EMCP 4.4 (CAT00000)

Parameter	Value
ECM Part Number	5034417-00
ECM Serial Number	2631E155TV
Software Group Part Number	6012310-00
Software Group Release Date	JUN2020
Software Group Description	EMCP 4.4 English, v4.10.5H PROD, 10 June 2020

Description	Value	Unit	Min	Max	ECM
EMCP4.4					
Engine Speed	1501	rpm	1498	1502	EMCP 4.4 (CAT00000)
Generator AC Frequency	50,0	Hz	50,0	50,0	EMCP 4.4 (CAT00000)
Generator Phase A RMS Voltage	231	Volts	231	232	EMCP 4.4 (CAT00000)
Generator Phase B RMS Voltage	231	Volts	230	231	EMCP 4.4 (CAT00000)
Generator Phase C RMS Voltage	230	Volts	229	230	EMCP 4.4 (CAT00000)
Generator Phase AB Line-Line AC RMS Voltage	401	Volts	400	402	EMCP 4.4 (CAT00000)
Generator Phase BC Line-Line AC RMS Voltage	398	Volts	398	399	EMCP 4.4 (CAT00000)

Generator Phase CA Line-Line AC RMS Voltage	399	Volts	398	400	EMCP 4.4 (CAT00000)
Generator Phase A RMS Current	2779	Amps	2773	2786	EMCP 4.4 (CAT00000)
Generator Phase B RMS Current	2859	Amps	2854	2867	EMCP 4.4 (CAT00000)
Generator Phase C RMS Current	2843	Amps	2837	2848	EMCP 4.4 (CAT00000)
Generator Total Real Power	1948	kW	1943	1966	EMCP 4.4 (CAT00000)
Generator Overall Power Factor	1,00		1,00	1,00	EMCP 4.4 (CAT00000)
Generator Total Apparent Power	1952	kVA	1947	1964	EMCP 4.4 (CAT00000)
Generator Total Reactive Power	48	kVAr	47	48	EMCP 4.4 (CAT00000)
Generator Excitation Field Current	2,00	Amps	1,85	2,10	Digital Voltage Regulator
Generator Excitation Field Voltage	29,70	Volts	15,05	33,60	Digital Voltage Regulator

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3516E Genset - ECM 2 Slave ECM (ZNL00293)

Parameter	Value
Engine Serial Number	ZNL00293
ECM Serial Number	28418122VW
Software Group Part Number	6081399-00
Software Group Release Date	FEB21
Software Group Description	EP-MEUIC_50Hz_PROD_10.2

Product Link Elite (ZNL00293)

Parameter	Value
Product ID	ZNL00293
Machine Serial Number	
Equipment ID	ZNL00293
ECM Part Number	4590786-04
ECM Serial Number	1581F524TR
Software Group Part Number	5754275-00
Software Group Release Date	Mar2019
Software Group Description	VIMS_TELEMATICS_2019_03_06
Application Software Part Number	5672205-00
Cellular Device ECM Serial Number	NA
Cellular Device ECM Hardware Part Number	NA
Cellular Radio Module Software Part Number	NA
Satellite Device ECM Serial Number	NA
Satellite Device ECM Hardware Part Number	NA
Satellite Radio Module Software Part Number	NA
Wi-Fi Radio Hardware Serial Number	NA
Wi-Fi Radio Hardware Part Number	NA
Wi-Fi Radio Software Part Number	NA

3516E Genset - ECM 1 Master ECM (ZNL00293)

Parameter	Value
Equipment ID	
Engine Serial Number	ZNL00293
ECM Serial Number	28418120VW
Software Group Part Number	6081399-00
Software Group Release Date	FEB21
Software Group Description	EP-MEUIC_50Hz_PROD_10.2

Digital Voltage Regulator

Parameter	Value
ECM Part Number	3147755-00
ECM Serial Number	28116004GD
Software Group Part Number	3184763-01
Software Group Release Date	NOV2007
Software Group Description	Regulator Software

Digital Pyrometer #1

Parameter	Value
ECM Part Number	3434631-04
ECM Serial Number	2921D024CL
Software Group Part Number	4559451-00
Software Group Release Date	MAR2014
Software Group Description	exhgaspyro

EMCP 4.4 (CAT00000)

Parameter	Value
ECM Part Number	5034417-00
ECM Serial Number	2631E155TV
Software Group Part Number	6012310-00
Software Group Release Date	JUN2020
Software Group Description	EMCP 4.4 English, v4.10.5H PROD, 10 June 2020

Description	Value	Unit	Min	Max	ECM
TEMP & PRESSION					
Engine Speed	1500	rpm	1499	1500	3516E Genset - ECM 1 Master ECM (ZNL00293)
Engine Coolant Temperature	83	Deg C	83	83	3516E Genset - ECM 1 Master ECM (ZNL00293)
Air Inlet Temperature	23,8	Deg C	23,8	23,9	3516E Genset - ECM 1 Master ECM (ZNL00293)
Intake Manifold Air Temperature	39,9	Deg C	39,7	39,9	3516E Genset - ECM 1 Master ECM (ZNL00293)
Fuel Temperature	28	Deg C	28	28	3516E Genset - ECM 1 Master ECM (ZNL00293)
Engine Oil Temperature	91	Deg C	91	91	3516E Genset - ECM 1 Master ECM (ZNL00293)

Engine Turbocharger #1 Turbine Intake Temperature	652,7	Deg C	652,7	653,0	3516E Genset - ECM 1 Master ECM (ZNL00293)
Engine Turbocharger #2 Turbine Intake Temperature	639,0	Deg C	639,0	639,4	3516E Genset - ECM 1 Master ECM (ZNL00293)
Boost Pressure	261	kPa	258	262	3516E Genset - ECM 1 Master ECM (ZNL00293)
Engine Oil Pressure	589	kPa	588	589	3516E Genset - ECM 1 Master ECM (ZNL00293)
Fuel Pressure	713	kPa	707	714	3516E Genset - ECM 1 Master ECM (ZNL00293)
Barometric Pressure	100,0	kPa	100,0	100,0	3516E Genset - ECM 1 Master ECM (ZNL00293)
Crankcase Pressure	0,4	kPa	0,3	0,4	3516E Genset - ECM 1 Master ECM (ZNL00293)
Fuel Consumption Rate	567,1	L/h	553,0	567,1	3516E Genset - ECM 1 Master ECM (ZNL00293)
Engine Load Factor	73	%	71	73	3516E Genset - ECM 1 Master ECM (ZNL00293)
Engine Power Derate	0	%	0	0	3516E Genset - ECM 1 Master ECM (ZNL00293)
Battery Voltage	26,5	Volts	26,0	26,5	3516E Genset - ECM 1 Master ECM (ZNL00293)
Engine Oil Filter Differential Pressure	35,0	kPa	34,5	35,0	EMCP 4.4 (CAT00000)
Air Filter #1 Restriction	2,7	kPa	2,6	2,7	3516E Genset - ECM 1 Master ECM (ZNL00293)
Air Filter #2 Restriction	3,0	kPa	2,9	3,0	3516E Genset - ECM 1 Master ECM (ZNL00293)

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3516E Genset - ECM 2 Slave ECM (ZNL00293)

Parameter	Value
Engine Serial Number	ZNL00293
ECM Serial Number	28418122VW
Software Group Part Number	6081399-00
Software Group Release Date	FEB21
Software Group Description	EP-MEUIC_50Hz_PROD_10.2

Product Link Elite (ZNL00293)

Parameter	Value
Product ID	ZNL00293
Machine Serial Number	
Equipment ID	ZNL00293
ECM Part Number	4590786-04
ECM Serial Number	1581F524TR
Software Group Part Number	5754275-00
Software Group Release Date	Mar2019
Software Group Description	VIMS_TELEMATICS_2019_03_06
Application Software Part Number	5672205-00
Cellular Device ECM Serial Number	NA
Cellular Device ECM Hardware Part Number	NA
Cellular Radio Module Software Part Number	NA
Satellite Device ECM Serial Number	NA
Satellite Device ECM Hardware Part Number	NA
Satellite Radio Module Software Part Number	NA
Wi-Fi Radio Hardware Serial Number	NA
Wi-Fi Radio Hardware Part Number	NA
Wi-Fi Radio Software Part Number	NA

3516E Genset - ECM 1 Master ECM (ZNL00293)

Parameter	Value
Equipment ID	
Engine Serial Number	ZNL00293
ECM Serial Number	28418120VW
Software Group Part Number	6081399-00
Software Group Release Date	FEB21
Software Group Description	EP-MEUIC_50Hz_PROD_10.2

Digital Voltage Regulator

Parameter	Value
ECM Part Number	3147755-00
ECM Serial Number	28116004GD
Software Group Part Number	3184763-01
Software Group Release Date	NOV2007
Software Group Description	Regulator Software

Digital Pyrometer #1

Parameter	Value
ECM Part Number	3434631-04
ECM Serial Number	2921D024CL
Software Group Part Number	4559451-00
Software Group Release Date	MAR2014
Software Group Description	exhgaspyro

EMCP 4.4 (CAT00000)

Parameter	Value
ECM Part Number	5034417-00
ECM Serial Number	2631E155TV
Software Group Part Number	6012310-00
Software Group Release Date	JUN2020
Software Group Description	EMCP 4.4 English, v4.10.5H PROD, 10 June 2020

Description	Value	Unit	Min	Max	ECM
EMCP4.4					
Engine Speed	1501	rpm	1498	1501	EMCP 4.4 (CAT00000)
Generator AC Frequency	50,0	Hz	50,0	50,0	EMCP 4.4 (CAT00000)
Generator Phase A RMS Voltage	231	Volts	231	232	EMCP 4.4 (CAT00000)
Generator Phase B RMS Voltage	231	Volts	230	231	EMCP 4.4 (CAT00000)
Generator Phase C RMS Voltage	230	Volts	229	230	EMCP 4.4 (CAT00000)
Generator Phase AB Line-Line AC RMS Voltage	401	Volts	400	401	EMCP 4.4 (CAT00000)
Generator Phase BC Line-Line AC RMS Voltage	398	Volts	397	399	EMCP 4.4 (CAT00000)

Generator Phase CA Line-Line AC RMS Voltage	399	Volts	398	400	EMCP 4.4 (CAT00000)
Generator Phase A RMS Current	3711	Amps	3699	3713	EMCP 4.4 (CAT00000)
Generator Phase B RMS Current	3799	Amps	3785	3804	EMCP 4.4 (CAT00000)
Generator Phase C RMS Current	3779	Amps	3768	3784	EMCP 4.4 (CAT00000)
Generator Total Real Power	2602	kW	2577	2612	EMCP 4.4 (CAT00000)
Generator Overall Power Factor	1,00		1,00	1,00	EMCP 4.4 (CAT00000)
Generator Total Apparent Power	2605	kVA	2587	2608	EMCP 4.4 (CAT00000)
Generator Total Reactive Power	77	kVAr	76	77	EMCP 4.4 (CAT00000)
Generator Excitation Field Current	2,65	Amps	2,45	2,70	Digital Voltage Regulator
Generator Excitation Field Voltage	35,70	Volts	21,45	37,10	Digital Voltage Regulator

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3516E Genset - ECM 2 Slave ECM (ZNL00293)

Parameter	Value
Engine Serial Number	ZNL00293
ECM Serial Number	28418122VW
Software Group Part Number	6081399-00
Software Group Release Date	FEB21
Software Group Description	EP-MEUIC_50Hz_PROD_10.2

Product Link Elite (ZNL00293)

Parameter	Value
Product ID	ZNL00293
Machine Serial Number	
Equipment ID	ZNL00293
ECM Part Number	4590786-04
ECM Serial Number	1581F524TR
Software Group Part Number	5754275-00
Software Group Release Date	Mar2019
Software Group Description	VIMS_TELEMATICS_2019_03_06
Application Software Part Number	5672205-00
Cellular Device ECM Serial Number	NA
Cellular Device ECM Hardware Part Number	NA
Cellular Radio Module Software Part Number	NA
Satellite Device ECM Serial Number	NA
Satellite Device ECM Hardware Part Number	NA
Satellite Radio Module Software Part Number	NA
Wi-Fi Radio Hardware Serial Number	NA
Wi-Fi Radio Hardware Part Number	NA
Wi-Fi Radio Software Part Number	NA

3516E Genset - ECM 1 Master ECM (ZNL00293)

Parameter	Value
Equipment ID	
Engine Serial Number	ZNL00293
ECM Serial Number	28418120VW
Software Group Part Number	6081399-00
Software Group Release Date	FEB21
Software Group Description	EP-MEUIC_50Hz_PROD_10.2

Digital Voltage Regulator

Parameter	Value
ECM Part Number	3147755-00
ECM Serial Number	28116004GD
Software Group Part Number	3184763-01
Software Group Release Date	NOV2007
Software Group Description	Regulator Software

Digital Pyrometer #1

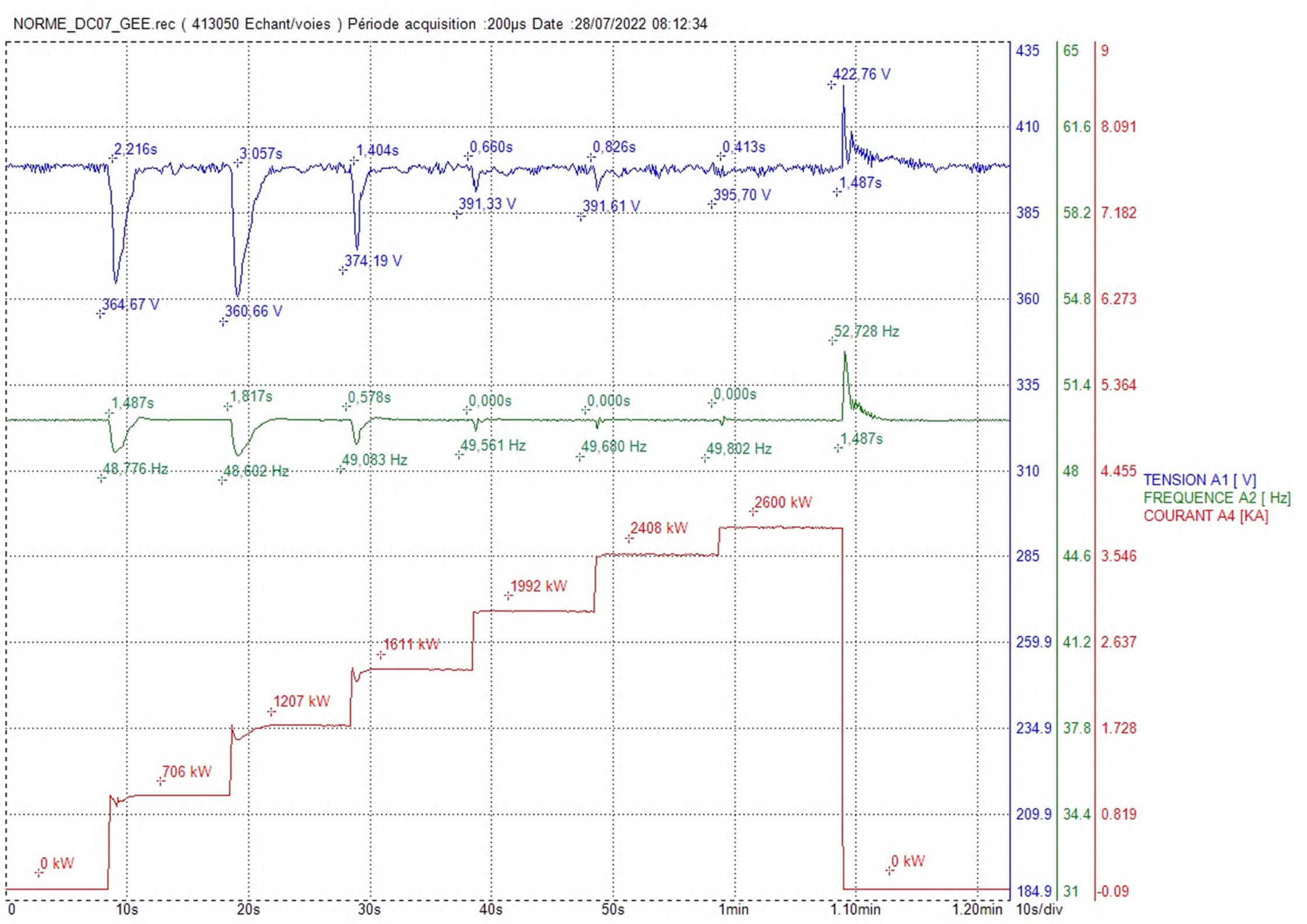
Parameter	Value
ECM Part Number	3434631-04
ECM Serial Number	2921D024CL
Software Group Part Number	4559451-00
Software Group Release Date	MAR2014
Software Group Description	exhgaspyro

EMCP 4.4 (CAT00000)

Parameter	Value
ECM Part Number	5034417-00
ECM Serial Number	2631E155TV
Software Group Part Number	6012310-00
Software Group Release Date	JUN2020
Software Group Description	EMCP 4.4 English, v4.10.5H PROD, 10 June 2020

Description	Value	Unit	Min	Max	ECM
TEMP & PRESSION					
Engine Speed	1500	rpm	1500	1502	3516E Genset - ECM 1 Master ECM (ZNL00293)
Engine Coolant Temperature	86	Deg C	86	86	3516E Genset - ECM 1 Master ECM (ZNL00293)
Air Inlet Temperature	25,6	Deg C	25,6	25,6	3516E Genset - ECM 1 Master ECM (ZNL00293)
Intake Manifold Air Temperature	45,8	Deg C	45,8	45,9	3516E Genset - ECM 1 Master ECM (ZNL00293)
Fuel Temperature	29	Deg C	29	29	3516E Genset - ECM 1 Master ECM (ZNL00293)
Engine Oil Temperature	95	Deg C	95	95	3516E Genset - ECM 1 Master ECM (ZNL00293)

Engine Turbocharger #1 Turbine Intake Temperature	678,9	Deg C	678,7	679,2	3516E Genset - ECM 1 Master ECM (ZNL00293)
Engine Turbocharger #2 Turbine Intake Temperature	660,9	Deg C	660,8	661,3	3516E Genset - ECM 1 Master ECM (ZNL00293)
Boost Pressure	331	kPa	329	334	3516E Genset - ECM 1 Master ECM (ZNL00293)
Engine Oil Pressure	566	kPa	565	567	3516E Genset - ECM 1 Master ECM (ZNL00293)
Fuel Pressure	653	kPa	650	665	3516E Genset - ECM 1 Master ECM (ZNL00293)
Barometric Pressure	100,0	kPa	100,0	100,0	3516E Genset - ECM 1 Master ECM (ZNL00293)
Crankcase Pressure	0,3	kPa	0,3	0,4	3516E Genset - ECM 1 Master ECM (ZNL00293)
Fuel Consumption Rate	693,4	L/h	689,9	710,1	3516E Genset - ECM 1 Master ECM (ZNL00293)
Engine Load Factor	89	%	89	92	3516E Genset - ECM 1 Master ECM (ZNL00293)
Engine Power Derate	0	%	0	0	3516E Genset - ECM 1 Master ECM (ZNL00293)
Battery Voltage	26,5	Volts	26,0	26,5	3516E Genset - ECM 1 Master ECM (ZNL00293)
Engine Oil Filter Differential Pressure	36,5	kPa	36,5	37,0	EMCP 4.4 (CAT00000)
Air Filter #1 Restriction	3,6	kPa	3,6	3,7	3516E Genset - ECM 1 Master ECM (ZNL00293)
Air Filter #2 Restriction	4,0	kPa	3,9	4,0	3516E Genset - ECM 1 Master ECM (ZNL00293)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1,404s
0,660s
0,826s
0,413s
1,487s
391,33 V
391,61 V
395,70 V
374,19 V
364,67 V
360,66 V
52,728 Hz
1,487s
1,817s
0,578s
0,000s
0,000s
0,000s
1,487s
49,561 Hz
49,680 Hz
49,802 Hz
49,083 Hz
48,776 Hz
48,602 Hz
2600 kW
2408 kW
1992 kW
1611 kW
1207 kW
706 kW
0 kW
0 kW
435
410
385
360
335
310
285
259,9
234,9
209,9
184,9
65
61,6
58,2
54,8
51,4
48
44,6
41,2
37,8
34,4
31
9
8,091
7,182
6,273
5,364
4,455
3,546
2,637
1,728
0,819
-0,09
TENSION A1 [V]
FREQUENCE A2 [Hz]
COURANT A4 [KA]
0
10s
20s
30s
40s
50s
1min
1.10min
1.20min
10s/div